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On Theseus and the Tyrannicides¹

CHRYSOULA P. KARDARA

PLATES 21B-23

AKYLIX in the British Museum (E 84), decorated by the Kodros Painter,² has an unusual feature in that the outside and the inside are the same in subject and very similar in design. Each shows Theseus in six of his exploits: the punishment of Skiron, the capture of the Marathonian bull, the death of Sinis, the contest with the sow of Krommyon, the wrestling with the robber Kerkyon, and the triumph over Prokrustes. Around the tondo, in which the slaying of the Minotaur is shown, the six exploits are in a continuous frieze, whereas on the outside these are necessarily separated, by the handles and the palmettes below, into two parts each of which consists of three groups.

When Cecil Smith published the drawing of the inside he suggested that two figures, one with Skiron and one with the sow of Krommyon, were imitated from the Tyrannicides. As evidence that the resemblance was not accidental he noted that Theseus with the sow was the only male figure in the series with a garment, which would be imitated by the garment of Aristogeiton. No illustration of the outside has hitherto appeared; plate 22A shows half of it. Worth noticing is that the wrestler group appears in essentially the same aspect as before. In the Prokrustes group and, for the most part, in the group of the Phaia and the sow the one version is like the other seen in a mirror, with right and left reversed throughout. The Theseus in the Krommyonian group, and that figure only, is the same figure in both versions, but seen from different points; from the front on the outside, from the back on the inside. In the other half of the exterior, illustrated in plate 22B all the figures are reversed with one exception, the Theseus at the right being again a front view of the figure that is seen from the back in the inside. The special treatment of these two figures, on which Cecil Smith did not

remark, could be explained by the fact that, more conspicuously than the others, they would be left-handed if reversed in the inside groups. However, if this were the only consideration the figures could have been repeated, as the wrestlers were, or could have changed in some other way. At all events it is hardly pure coincidence that the only figures to be drawn as if the draftsman had studied two statues, first from the front and then from the back, are the same figures that correspond in position and action to the Tyrannicides. They are not, of course, to be regarded as real copies; they testify to the celebrity of the Tyrannicides, but hardly give any information about them. Yet perhaps the Harmodios-Theseus group offers some confirmation for Miss Richter's reconstruction in the Metropolitan Museum in which the right forearm is approximately horizontal above the head.³

The tondo of London E 84 was long ago seen to be related in subject, composition, and style to the tondi of two other kylixes, of which one, signed by Aison, is in Madrid⁴ (no. 11265), the other in the school of Harrow on the Hill⁵ (no. 52). Two articles were written mainly about this similarity, but confining the discussion to the tondi only, their writers hardly paid any attention to the similarity of the other groups. A consideration of the three tondi led Wolters, the author of the first article, to remark⁶ that in the London and Harrow vases "haben wir es offenbar mit Werken derselben Fabrik, vielleicht derselben Hand, zu tun, aber auch die Schale des Aison hängt trotz einer gewissen Selbständigkeit zweifellos von dem gleichen Vorbilde ab." Wolters was evidently tempted to attribute the three vases to the same painter, as Hauser⁷ later did in briefly reviewing the matter in connection with the career of Meidias. Crediting Aison with the execution of all three kylixes, the latter had

concluded that if the same painter depicted the Theseus cycle as many as five times on these three cups, "es wird kaum eine übertriebene Berechnung sein, wenn wir annehmen, dass Aison seinerzeit diese selben Theseusbilder dann vielleicht fünfzigmal abklatschte." For G. W. Elderkin, the author of the second article to discuss the relation of the tondi, there seemed to be, on the contrary, three painters for the three kylixes, of which the one in the British Museum was to be regarded as the oldest and best.⁸ This is also the recent view of Sir John Beazley. He had previously assigned the Harrow kylix to the Kodros master,⁹ as Wolters had; but a later examination of the matter in connection with another kylix already attributed to the Phiale Painter convinced him that the Harrow kylix was related to it.

Pottier once remarked¹⁰ that copyright, as we understand it, would have been incomprehensible among the Athenian vase-painters and other draftsmen. This remark might well be justified by London E 84 and its adherents, for the similarity of the Theseus groups is not limited to the three vases already mentioned, but further extends to a stemless kylix in Verona,¹¹ which, assigned by Beazley to the Phiale Painter, led him also to assign to the same circle, though not to the same painter, the Harrow kylix. The decoration of the Verona stemless kylix consists of two exploits only, the contests with the bull and sow. A calyx-krater in Oxford¹² might also be claimed as another relative of the London kylix. Attributed to the Dinos Painter by Beazley, this has a quite elaborate decoration including six deeds of Theseus, Prometheus as fire-lighter, and Eos with Kephalos. Two of the Theseus exploits, with the bull and the sow, might suggest a comparison with the London kylix; but the resemblance is hardly close enough to be significant, and the krater is mentioned chiefly as a notable addition to the list of the Theseus vases.

The series of groups on these vases show some diversity. It should be mentioned that the Madrid kylix has no interior frieze, while that on the outside of the Harrow vase consists of four groups instead of six. The central group of each half of the London exterior is omitted in Harrow; these are the Kerkyon and the bull

groups. That is presumably because the Harrow vase is only about half as large as the other. Nevertheless, space is found in the interior for all the groups of the London interior, but a difference is introduced in the exchange of places between the Sinis and Prokrustes groups. In spite, however, of the noted modifications the two kylixes look like two editions of the same theme. This cannot be said of the Madrid kylix, where Aison's adaptation is freer; the order of the exploits is changed and the groups, by overlapping one another and having greater movement, provide the decoration with a more intricate as well as a more dramatic aspect.

The relation between the two series on the London kylix has been stated above, and the relations of the other series may be indicated in quasi-tabular form.

Skiron

Harrow: Exterior like London exterior, interior like London interior.

Madrid: Unlike either London group.

Sow

Harrow: Both exterior and interior groups like London exterior, "Aristogeiton" being seen from the front in both.

Verona: like London exterior except that the woman is in the foreground in relation to the sow.

Madrid: Like London exterior in general scheme, not close; woman and sow placed as in Verona.

Sinis

Harrow: Exterior like London exterior, interior like London interior except that it lacks the rock which appears there and not in the London exterior.

Madrid: Like Harrow interior.

Prokrustes

Harrow: Exterior like London exterior. Interior: Prokrustes himself is as on the exterior; Theseus is a back view of the Theseus of the London interior.

Madrid: Like London exterior in general scheme.

Bull

Harrow: Absent from exterior; interior like London exterior.

Verona: Like London interior.

Madrid: Like London interior in general scheme.

Kerkyon

Harrow: Absent from exterior; interior quite unlike London.

Madrid: Like Harrow in general scheme.

In the alteration of the figure in the interior Prokrustes scene, the painter of the Harrow kylix was adopting the method of the Kodros Painter, though not copying his figure. In dealing with the Skiron group, Aison returned to an earlier scheme, as will shortly appear. It may well be that the recognizable imitation of Harmodios had political significance which Aison wished to avoid. The Kerkyon scene is the only one in which there is reason to suspect, for the later vases, a specific influence other than that of the Kodros Painter.¹³ This painter's version of the scene was apparently original with him, and E. N. Gardiner finds it satisfactory as an athletic illustration, but the two later painters may reasonably have found it undramatic; at any rate they returned to a scheme used in the metope of the Athenian Treasury and elsewhere. The similarity between Aison's design and that in Harrow is hardly great enough to prove a close relation, but it is not likely to be pure coincidence that both painters departed in the same direction from the Kodros Painter's scheme.

In order to determine how far the Kodros Painter established the types for this little "school" and how far he merely followed his predecessors, it is necessary briefly to survey earlier versions of the Theseus cycle.¹⁴ There is no earlier vase-painting known to have contained as many as seven exploits. The kylix in Florence, signed by Chachrylion,¹⁵ shows six, lacking the sow; E 36 in the British Museum¹⁶ shows five, lacking Sinis and Skiron; the famous Panaitios kylix in the Louvre¹⁷ shows four (plus Amphitrite in the tondo), lacking Sinis, sow, and Minotaur; the notable but fragmentary kylix by Epiktetos II, in the Bibliothèque Nationale,¹⁸ probably showed six, according to Beazley's examination, lacking the sow; Bologna PU 270,¹⁹ regarded as a late work of Epiktetos II, shows five, lacking Sinis and the sow; the signed kylix by Douris, in the British Museum,²⁰ shows five, lacking Prokrustes and the bull; Florence 70800 shows five,²¹ lacking

Kerkyon and the sow; Louvre G 265²² is said to show four, lacking Skiron, Kerkyon, and the Minotaur; Munich 2670,²³ assigned to the Pistoxenos Painter, shows three (plus Periphetes), lacking Sinis, Kerkyon, bull, and sow. In addition there are two series of metopes, belonging to the Athenian Treasury at Delphi²⁴ and the "Theseum";²⁵ the former probably comprised nine Theseus scenes, the latter eight. Of these eleven ensembles it may be said that none, as a whole, bears any considerable resemblance to the Kodros Painter's series.

Among the individual exploits only two need be considered for the present purpose. In most of the early versions of the fight with Skiron, Theseus seizes Skiron's leg and hurles or pushes him from the cliff.²⁶ In a few vases, perhaps all later than 475, Skiron sits in quiet conversation with Theseus.²⁷ In the metope of the Athenian Treasury, Skiron apparently was not being handled in the usual manner, and LaCoste-Messelière suggested that the scene was somewhat as in Aison's kylix, but one cannot be sure because virtually nothing remains of Theseus. In the Pistoxenos Painter's kylix the basin is used as a weapon, and the motive of the Kodros Painter is thus anticipated, but there is little similarity in the figures. In no known earlier version is there any approximation to the Harmodios-like Theseus. Aison returned, in this exploit, to the type represented by the Pistoxenos Painter.

Early illustrations of the fight with the sow are not numerous. The British Museum kylix, E 36, has an apparently unique version in which Theseus drags the sow by a hind leg. The "Theseum" metope, in which the combatants stand up to each other, also stands alone. In the Louvre kylix, G 265, Theseus is said to raise a club in the right hand, which again is unusual. However, there are three vases in which the hero has some resemblance to the Kodros Painter's figure and to Aristogeiton: the kylix signed by Skythes in the Villa Giulia,²⁸ the British Museum kylix E 48, signed by Douris, and the British Museum kylix E 74, assigned to the manner of the Penthesileia Painter.²⁹ The latter two show garments over the extended left arms; the Skythes kylix does not, but in it the left hand holds a scabbard, and the figures suggested to Rizzo

the phrase "una ingenua contraffazione di un assai ridotto Tyrannoktonos." Of course the Skythes Theseus could not be imitated from the Aristogeiton of 477. Nor could he follow Antenor's Aristogeiton, if that statue was set up in the period of 490 to 480. The resemblance may well be altogether fortuitous, for Theseus had appeared in largely similar guise in many black-figure scenes with the Minotaur.³⁰ At all events, it is clear that the Kodros Painter's Theseus with the sow was not so novel as his Theseus with Skiron. One is tempted to suggest that he first noticed the resemblance between the established vase-type and Aristogeiton and then devised an adaptation of Harmodios as a companion figure.

Without specific examination of the remaining exploits, one may recognize that the Kodros Painter's series differs substantially from any known predecessor. Steuding³¹ and others have inferred that he and his companions were influenced by a mural painting which would be slightly earlier than the Louvre kylix. This mural would presumably be reflected most directly in the exterior scenes of that kylix, in which the Tyrannicides appear in front view. However, the innovations in representation are accompanied by another innovation, by which the series is shown in duplicate. This certainly would not occur in a mural or other work of major art, but can only be due to a vase-painter. It would seem reasonable to infer that the other novel features are likewise due to a vase-painter, probably to the Kodros Painter himself, though a predecessor in vase-painting cannot be disproved. The painter of the Harrow kylix certainly imitated the Kodros Painter or his possible predecessor, and there is no reason to suspect the influence of a mural on Aison.

It has doubtless been assumed still more generally that the earlier Theseus-cycles on vases reflect an earlier mural,³² but this too is open to question. It may be significant that the Cachrylion kylix, earliest or second earliest of them and hence close in time to the supposed model, is least representative of the series of vases. The two Theseus-cycles in major art that we know, the two series of metopes, had little influence on the vase-painters, and this should warn against ascribing great influence to mural paintings that are not known to have existed.

Some man had to be first in designing a series of Theseus' exploits; his name could be Euphronios as well as Kimon.

Two imitations of the Tyrannicides in Attic red-figure have been published in recent years: an oinochoe in the Villa Giulia,³³ in which Harmodios follows Aristogeiton, and a fragment in Agrigento,³⁴ in which Harmodios is seen from the back. A fragment in Florence, previously mentioned but not illustrated, is shown in plate 21B. It is ascribed by Beazley to the Euaion Painter.³⁵ The exact subject of this is not easy to determine, and it may be that none was present in the mind of the painter. It is a scene of fighting, but not of battle, of two against one; the one is youthful, at least one of the two is bearded; the chlamydes and petasoi suggest travel; it could be Oidipous against Laos and his attendant. The two men at the right are influenced by the Tyrannicides, as Beazley observed. The imitation is not close, since "Harmodios" has a beard and the costumes are modified; in neither figure alone could a relation to the statue be recognized with confidence, but when the two figures are considered together the relationship will not be questioned. A volute-krater in the Museum of Spina at Ferrara³⁶ presents an analogous instance. The two figures in the attitude of the Tyrannicides depicted on the shield of the stately figure below the right handle are engaged in a battle scene. The one (Aristogeiton), dressed as a Greek warrior with helmet, cuirass, greaves, sword in right hand and shield in left, is moving against the other (Harmodios), his adversary, clad in an Amazon's costume. Neither of the two seen separately would be associated with either of the Tyrannicides. Aristogeiton, deprived of his cloak, is given instead a shield. Harmodios is provided with a bow. What is more, he is seen in the attitude of retreat, a somewhat awkward posture resulting from the painter's desire to compromise in order to suggest the triumph of the Greek warrior. Together, however, as a group, the two figures, despite modifications in attitude and attire, could not but be reminiscent of the group in the round. A somewhat similar, but more doubtful, case is presented by a fragment of a krater from Taranto, made in Southern Italy at the beginning of the fourth century.³⁷ Here

two figures appear as lateral akroteria of a paraskenion of a theatre. Neither of them, considered alone, could reasonably be connected with the Tyrannicides, but when we have both, used as pendants, the resemblance to the statues is at least noticeable. A bit of confirmation may be found in the battle ax which, as is learned from Bulle's description rather than from the illustration, is held in the right hand of the figure at the left. There is little point in holding such a weapon horizontally, at arm's length, and it might have been suggested by the scabbard of Aristogeiton in the same position.

In any consideration of the Tyrannicides one encounters the problem of their relative position, and a few remarks on this topic may be in order, though Buschor's study of 1940, with its illustrations of casts in fifteen different arrangements, is exhaustive in its way.³⁸ When Meritt published the inscribed fragment from the Agora, which he regarded as belonging to the corner of the base of the group, he came to the conclusion that the total length of the inscription would be 1.38 m.³⁹ Since the inscription left no space vacant at the one end of the stone, it presumably left none at the other end, and the measurement of the base would be virtually the same. Before Meritt's article appeared Schefold⁴⁰ had reached a very different conclusion from the same data, giving the total dimension of the base as about two metres and restoring the group to correspond, substantially as shown on the oinochoe from the grave of Dexileos,⁴¹ where Aristogeiton follows Harmodios without overlapping. In his later book Schefold still supported this restoration.⁴² Still more recently A. Raubitschek has suggested, without clearly indicating his reasons, that the length of the inscription should be between 1.50 m. and 1.70 m.⁴³ Meritt has kindly written that, though the spacing of the letters is not perfectly consistent and Raubitschek's conclusion might be justified by calculations based on *αρμο* in the first line, yet the space occupied by ten letters in each line indicates 1.38 m. as the total length. Also, from his recollection of the stone, he thinks that there is nothing to suggest that another stone rested on or adjoined the inscribed fragment. It seems probable that Meritt's reasoning will stand; in

which case not only Schefold's restoration, but also Waser's⁴⁴ and various others (Buschor's Figs. 3, 9, 10, 13, 15, 16) will be put out of court.

In those two restorations there is no doubt which face of the base would bear the inscription. In the restoration made at Braunschweig,⁴⁵ perhaps to be regarded as the old standard one, the inscription *probably* would be on the wide side (toward which the figures step) rather than on the long side (parallel to their stride). The exact dimensions of this base are not known to me, but apparently the width would be too great for Meritt's calculation, the length not great enough. It will be observed that the stride taken by each figure is not directly forward, but somewhat to the side, and the figures are turned slightly toward each other. The figures stand (or stood before the war) in the Museum at Naples in such a position that they are rotated slightly away from each other, as compared with the Braunschweig restoration; if they stood on a rectangular base, it would be less wide than in Braunschweig, but longer from front to back. In the restoration in the Metropolitan Museum (plate 23) they are turned more decidedly away from each other, so that the feet of each figure are almost in a line perpendicular to the width of the base, and the base would be distinctly longer than wide. In this case dimensions can be given: the length is said to be 1.36 m., the width slightly less than a metre, including the interval between the individual bases.

The dimensions of the base can be changed by varying the relative position of the figures and also, naturally, by moving them farther apart or closer together. If Meritt's dimension is right for the width of the base, the figures would surely stand side by side; the exact position cannot be determined, but would presumably be between the Braunschweig and Metropolitan restorations. If Meritt's dimension is right for the length, the Metropolitan restoration is just right (the difference between 1.38 and 1.36 m. being insignificant) and can be varied but little, since any other would require a different length.⁴⁶

The view shown in the Metropolitan photograph is anything but satisfying; if the restoration is correct, this aspect was not taken into

account by the sculptors, who expected each statue to be seen from the side. In the Braunschweig restoration there might be more doubt about it, but Bulle, Buschor and others have recognized that there too the front view offers little, and that the statues were designed for side views. It is scarcely necessary to say that in no variation of the side-by-side group—that is, in no composition permitted by Meritt's calculation—can one see *both* statues even moderately well from either side; they were not designed for one side view, but for two separate side views.

Since they were designed to be seen separately, it would seem that they should have stood on separate bases, as in the Metropolitan restoration. That they actually did stand on separate bases does not necessarily follow, but the general assumption to the contrary is somewhat remarkable. To be sure, the two statues are mentioned together by several ancient authors, sometimes in giving their position in Athens, but their position is never given so precisely as to show that they were very close together. And they are not *always* mentioned together: the old men in the *Lysistrata* take their stand beside Aristogeiton,⁴⁷ and Praxagora in the *Ekklesiastousai* beside Harmodios,⁴⁸ with no mention in either case of the other figure. It is not suggested that this is positive evidence that the two were not together; but the literary evidence offers no proof, or even indication, that they were as closely together as a single base would require.

As for the archaeological evidence, it may be noted in the first place that the copies stand on individual bases. Since in marble the contrary would hardly be expected, this consideration has little weight. However, it might perhaps be expected, if the two statues were regarded as constituting a definite unit, that their bases would be inserted in a single larger one. This was certainly not true of the Naples Aristogeiton, as the mouldings on its base show, and probably not of the Capitoline Aristogeiton, with its asymmetrical base.⁴⁹

The unmistakable imitations in the minor arts show the two figures together, but that is because they were celebrated chiefly as patriotic monuments and the patriotic feat that they commemorated was a joint performance. The

freedom with which they are combined in the imitations is significant. Harmodios follows Aristogeiton without overlapping (Villa Giulia oinochoe)⁵⁰ or Aristogeiton follows Harmodios similarly.⁵¹ They overlap slightly (two Hildesheim Panathenaics)⁵² or more (British Museum Panathenaic)⁵³ or still more (Broom Hall relief).⁵⁴ In the Kyzikos coin,⁵⁵ the Athenian silver coins,⁵⁶ and the Newell fragment,⁵⁷ one may say that the figures are as nearly side by side as is practicable. In the overlap groups Aristogeiton is usually ahead. This is desirable for clarity since, if the figures are anywhere near side by side, Aristogeiton's left arm must project conspicuously; nevertheless Harmodios is ahead in the Broom Hall relief. Usually the movement is toward the left, with Harmodios closer to the spectator. In two of the more notable imitations (Kyzikos coin and Broom Hall relief) the movement is toward the right and Aristogeiton is closer. Always or almost always⁵⁸ Aristogeiton is at the right (of the figures themselves), but this has the obvious explanation that, with the contrary arrangement, the figure in the foreground would be seen from the back. It seems unlikely that the figures would be so freely shifted in the imitations if they stood in close and fixed association.

It could perhaps be argued that the base to which the Agora fragment belonged bore an epigram containing the names of both Tyrannicides and hence should have borne both statues. But this is hardly valid. The association of the two men in their great exploit would justify the association of their names wherever one of them was named. Presumably there would be another epigram on the second base. There is another point about the fragment: a fairly good case, at least on the epigraphical side, can be made out for assigning it to Antenor's work (dated 490–480), rather than to the later one of Kritios and Nesiotes, to which all other evidence applies.⁵⁹ To this it can only be replied that the two pairs were probably similar in scheme, as has generally been supposed, so that evidence on one would serve for the other also.⁶⁰

Although the evidence does not justify a wholly positive conclusion, it seems very probable that the statues stood as they stand, each on its own base. The original effects should be closely approximated by the Metropolitan

restorations, taken separately, or by the Capitoline Aristogeiton, where the differing corners of the base emphasize the long side as the real front.

THE UNIVERSITY OF CHICAGO
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¹ An earlier version of this paper was read at the Annual Meeting of the Archaeological Institute of 1948, at St. Louis. I am indebted to Professor Franklin P. Johnson for help, encouragement and criticism, and also to Professor Oscar Broneer. The photographs reproduced in plates 22A, 22B, and 23 were lent by Mr. Johnson, that reproduced in plate 21B by Sir John Beazley. I am grateful also to the British Museum, the Metropolitan Museum, and Professor A. Minto in Florence for permission to publish the photographs.

² Beazley, *Attic Red-Figure Vase-Painting*, p. 739, no. 4; *JHS* 2 (1881) pp. 57-64, pl. 10 (Cecil Smith); Pfuhl, *Malerei und Zeichnung* III, fig. 573 (photograph of interior). Smith's plate is reproduced in Furtwängler-Reichold III 49; Roscher, *Lexicon*, s.v. Theseus, col. 702; and elsewhere.

³ *AJA* 32 (1928) 3-5.

⁴ Beazley, p. 800, no. 20; Hoppin, *HRF* 1, 15; *CVA* III, 1 c, pls. 1-4; *FR* III 48; Pfuhl, *MuZ* III, fig. 576.

⁵ Beazley 660; *Sitz. Bay.* (1907) pl. 1, pp. 113-32 (Wolters).

⁶ *Ibid.*, 119.

⁷ *FR* III 51.

⁸ *AJA* 14 (1910) 185-90.

⁹ Beazley, *Attische Vasenmalerei* p. 426, no. 8.

¹⁰ *Douris* 52.

¹¹ Beazley, *ARFVP* p. 659, no. 110; *Arch. Zeit.* 1885, pl. 7, no. 1.

¹² Beazley, *op. cit.* p. 790, no. 11; *AJA* 43 (1939) 618-39, pls. 10-13.

¹³ The Kerkyon groups are usually considered along with other representations of wrestlers, which are discussed by E. N. Gardiner: *Athletics in the Ancient World* 181 ff.; *Greek Athletics* 372 ff.; *JHS* 25 (1905) 263 ff. A group like the Treasury metope: De Ridder, *Bronzes trouvés sur l'Acropole* no. 747.

¹⁴ The most valuable discussion is the article on Theseus by Steuding, in Roscher's *Lexicon* (1919-20), with references to earlier writing. In this general article the Minotaur and the Bull are discussed, and there are separate articles in the same work on Krommyon and Sinis; on Sinis see especially *JHS* 33 (1913) 296-312 (Tillyard). Buschor (*FR* III 117-23; published 1921) deals especially with Skiron, Prokrustes, Kerkyon, and bull. The important article by Dugas (*REG* 35 [1943] 1-24) deals with the evolution of the legend in art and literature. Cf also Herter, *Die Antike* 17 (1941) 209-28; Schefold, *Mus. Helv.* 3 (1946) 89 f.

¹⁵ Beazley, *ARFVP* p. 82, no. 4; Hoppin, *HRF* I 153; *Harvard Studies* 35 (1924) 94-97 (K. Elderkin). In this and the following notes, citations are reduced to a minimum; others in Beazley.

¹⁶ C. Smith, *Catalogue* III, pl. 2; Beazley, p. 83, no. 7.
¹⁷ Beazley, p. 214, no. 10; *FR* III, pls. 5 and 141; Hoppin *HRF* I 399.

¹⁸ Beazley, *ARFVP* p. 128, no. 92; *Kleophrades-Maler* pls. 9, 10, 13-15, pp. 99-22. The old restoration (*JHS* 10 [1889] pl. 2) is to be revised in accordance with Beazley's remarks.

¹⁹ Beazley, p. 128, no. 95; *Mus. It.* III, cols. 259-62; Pellegrini, *VPU* 37.

²⁰ E 48; Beazley, p. 283, no. 46; Hoppin, *HRF* I 238.

²¹ Beazley 272; *Mus. It.* III, pl. 3.

²² Beazley, p. 273, no. 1. No illustration of the Theseus scenes is available, but Pottier gives a detailed description (*Vases antiques* III 217).

²³ Jahn 372; Beazley, p. 575, no. 8; Gerhard, *AV* pls. 232 f.

²⁴ *BCH* 47 (1923) 396 ff. (LaCoste-Messelière); cf. *Mus. Helv.* 3 (1946) 73 f., 90 ff. (Schefold); Schefold, *Die grossen Bildhauer des archaischen Athen* 57, 75.

²⁵ Sauer, *Das sogenannte Theseion* pl. 5.

²⁶ Notes 15, 17, 18, 19, 20, 21, 25. Pelike 3985 in Florence; Beazley, p. 28, no. 2; Hoppin, *Euthymides and his Fellows* pl. 23; *CVA* fasc. 2, III, 1, pl. 32; ascribed to the Vienna Painter. Kylix G 126 in the Louvre, ascribed to Douris; Beazley, p. 287, no. 109; Pottier, *Vases antiques du Louvre* pl. 112. Kylix 2288 in Berlin, ascribed to Douris; Beazley, p. 287, no. 110; *JdI* 31 (1916) pl. 4, pp. 86 f. Amphora in the Gallatin collection, assigned to the Gallatin Painter; Beazley, p. 163, no. 3; *CVA* USA fasc. 8, pl. 51, l. Hydria 1914.731 in Oxford, ascribed to the Troilos Painter; Beazley, p. 191, no. 11; *CVA* pl. 31, nos. 1-2.

²⁷ Handle of volute krater, G 194, in Louvre, manner of the Syriskos Painter; Beazley, p. 199, no. 2; Pottier, *op. cit.* pl. 128. Kantharos 2565 in Munich, ascribed to the Penthesileia Painter; Beazley, p. 588, no. 109; Diepolder, *Penthesileia-Maler* pl. 9. Pelike in Frankfurt, ascribed to the Euaion Painter; Beazley, p. 530, no. 81; *JHS* 59 (1939) pl. 11, b. Louvre G 265: note 22 above.

²⁸ Beazley, p. 74, no. 13; Hoppin, *HRF* II, pp. 412 f; Rizzo, *Mon. Piot* 20 (1913) 108-115.

²⁹ Beazley, p. 628, no. 2. Professor Beazley kindly sent sketches of the figures on this vase.

³⁰ Steuding, cols. 700 f. A good example by the Antimenos Painter: British Museum B 247; *JHS* 47 (1927) 74, 76; *CVA* III H, e, pl. 60, no. 3. The type continues in red-figure; cf. especially B. M. E 36 and the kylix of the Pistoxenos Painter (notes 16 and 23 supra).

³¹ In Roscher, cols. 735 f.

³² Steuding, *ibid.*; Buschor, *FR* III 118; Schefold, *Die grossen Bildhauer* 57; Pottier (*Catalogue* 942) suggested a prototype in sculpture.

³³ *JOAI* 33 (1941) p. 27, fig. 13 (Bakalakis).

³⁴ *Ibid.* p. 26, fig. 12; *JHS* 68 (1948) 26-28 (Beazley). Another fragment published by Beazley, *loc. cit.* comes from a scene showing the death of Hipparchos, but has no sure relation to the statues.

³⁵ Beazley, *ARFVP* p. 531, no. 1. Here the fragment is assigned to the manner of the Euaion Painter, but Professor Beazley has stated orally that he now places it in the late period of the painter himself.

²⁶ S. Aurigemma, *Il R. Museo di Spina*² p. 260, pl. 127; assigned by Beazley (*ARFVP* p. 428, no. 1) to the Painter of Bologna 279, a follower of the Niobid Painter.

²⁷ 94th Berlin Winkelmansprogramm, 1934 (Bulle) pl. 1; *AA* 56 (1941) 755.

²⁸ *Die Tyrannen-Mörder* (Sitz. Bay. 1940, no. 5). I say fifteen rather than sixteen because in no. 2 the statues stand on separate bases.

²⁹ *Hesperia* 5 (1936) 355 f.

³⁰ *JdI* 52 (1937) 33 ff.

³¹ Hahland, *Vasen um Meidias* pl. 6, A; *AJA* 32 (1928), 148, fig. 2. The same arrangement is used in Buschor's fig. 4.

³² *Die Bildnisse der antiken Dichter Redner und Denker* (1943) 13; *Mus. Helv.* 1 (1944) 189-202; 2 (1945) 263 f.; *Die grossen Bildhauer* 50 f.

³³ *Dedications from the Athenian Acropolis* 514. This is a notable discussion of various points in connection with the Tyrannicides and their sculptors.

³⁴ *AA* 1922, cols. 153-165; cf. Buschor, fig. 7.

³⁵ Bulle, *Der schöne Mensch*³ col. 171, fig. 38; *RM* 20 (1905) 330-347; cf. Buschor, fig. 1.

³⁶ A restoration presented by Bakalakis (note 33) corresponds approximately, as he says, to Buschor's fig. 8 and shows Harmodios slightly advanced beyond Aristogeiton. The author states that the base required would be about 1.40 m. long; but in Miss Kenner's drawing, which he presents, the figures occupy the length of the base rather more fully than would be expected, and in Buschor's judgment (p. 30) this arrangement cannot be reconciled with Meritt's dimension. Buschor of course recognizes that his own preferred restoration, on a base about two metres long, requires the assumption that the inscription did not occupy the entire length of the base. A restoration of the group, based particularly on the Roman Aristogeiton, is presented by Giglioli (*Archeologia Classica* I, 1 [1949] pl. 20; cf. pp. 69-72 and pls. 17-19). The illustration does not show the group from the front, but apparently the result is nearly the same as in the Metropolitan. Later (*op. cit.* II, 2 [1950], pp. 82-84, pls. 22-23) Giglioli presents a wedge-shaped composition, on the assumption, very reasonable if that scheme be adopted, that the group stood at an intersection of two streets.

³⁷ *Lysistrata* 633.

³⁸ *Ekklesiastousai* 682.

³⁹ *AJA* 44 (1940) 396, fig. 28; cf. note 46 *supra*.

⁴⁰ Note 33 *supra*.

⁴¹ Note 41 *supra*.

⁴² *AA* 1919, cols. 79, 86 b-c.

⁴³ *Ibid.* col. 86 a; Richter, *Sculpture and Sculptors* fig. 570. On all three Panathenaics cf. Beazley, *AJA* 47 (1943) 453 f.

⁴⁴ *JHS* 69 (1949) 22-27, pl. 7; *JHS* 5 (1884) 196 ff, pl. 48.

⁴⁵ Richter, *op. cit.* fig. 567.

⁴⁶ Svoronos, *Les Monnaies d'Athènes* pl. 74, nos. 9-21.

⁴⁷ Richter, *op. cit.* fig. 569.

⁴⁸ Apparent exception: Svoronos, *op. cit.* pl. 74, no. 25.

⁴⁹ Note 43 *supra* and *AJA* 44 (1940) 58, note 2 (Raubitschek); cf. *RA* 15 (1940) 5-10 (LaCoste Messelière).

⁵⁰ The theory that imitations of the two pairs could be distinguished according to the right arm of Harmodios (Richter, *AJA* 32 [1928] 1-8) can hardly be upheld, since it now appears that the Hildesheim Panathenaics belong definitely to the period when Antenor's statues were in Persia and that no known representation of the Tyrannicides is pre-Persian (cf. Beazley *JHS* 68 [1948] 26-28). For a tentative suggestion that the Antenor statues may be imitated in coin types quite unlike the known Tyrannicides, see Pick, Index II in Svoronos, *Les Monnaies d'Athènes* s.v. Dioscures (pl. 55, nos. 16-29). Jonkees (*Mnemosyne* 1947, 145-160) would regard another coin-symbol, a single figure, as imitated from the Harmodios of Antenor. Schefold (*Mus. Helv.* 2 [1945] 263 f.), reviving an old suggestion by Studniczka, would regard the Webb head in the British Museum as copied from Antenor's Harmodios. This is in accord with Pryce's opinion (*Catalogue of Sculpture* I 1, p. 32) that the head is a copy, not an original; but it seems improbable that the Harmodios heads in the two groups should be totally unlike. Schefold believes that the earlier Harmodios had the same position as the later one, and suggests imitations in vase-painting which, if accepted, would prove that the Antenor group was set up soon after 510 (*Mus. Helv.* 1 [1944] 189-202; 3 [1946] 89). The Theseus with the sow in the British Museum kylix E 36 (n. 16 *supra*) is not convincing as a derivative; the Telamon on the Arezzo krater by Euphronios is plausible, but hardly more so than a fragment ascribed to Epiktetos (Beazley, p. 46, no. 18; *NS* 1900, p. 177, fig. 26), which could well be supposed earlier than 510. A fragment assigned by Beazley to Epiktetos (*ARFVP* 46, no. 18) has a warrior who, as far as preserved, is much like the Telamon; one would suppose this fragment very little, if at all, later than 510.

The Roman Style in Gandhāra

ALEXANDER C. SOPER

PLATES 24-31, 32B

WHAT was the source of the classicism of Gandhāran sculpture? To this long debated problem the most eloquent answer has been twice made by Foucher, in publications separated by a lifetime of experience.¹ To him the strongly classical look of the Gandhāran Buddha type and the wholesale borrowing in North India of antique architectural and decorative motives were a natural by-product of Hellenistic imperialism. The cultural dominance exercised first by the Seleucid dynasty and then by the Bactrian Greeks who ruled on Indian soil during the second century B.C. must have implanted there at least a provincial grade of Hellenistic art. By a happy accident, just before the obliteration of Greek rule by Scytho-Parthian hordes in the first century, a cultural marriage at last took place in Gandhāra between Greek rationalism and Indian religion. With the conversion to Buddhism of Greek princes like Menander, the conditions were created that made possible a new kind of Buddhist art; an art whose Greek component was most unmistakable in the act of imagination that created the Buddha image.² So firmly based was this new structure that it survived two major waves of invasion, the Scytho-Parthian of the first century B.C. and the Kushan a century later. Since the barbarian patrons could contribute nothing but zeal, however, their pious multiplication of images brought only an increasing alienation from the Greek standard. The earliest works must therefore have been the most classic. Foucher dates these, from extant remains, around the middle of the first century B.C.

Every discussion of Gandhāran chronology must deal with two prime items of evidence for the classicizing phase, the standing Buddhas from Loryān-tāngai and Chārsada, dated in the 318th and 384th years respectively of an un-

specified era. Such was the confusion of Indian history at this period that a not too implausible case may be made out for any one of a half dozen eras. Foucher, whose interest has lain in making the statues as early as possible, was naturally led at the beginning to a very early initial year: i.e. 321 B.C., the beginning of a hypothetical "Mauryan era" commemorating the establishment of the first Indian empire. In his final statement he has admitted the awkwardness of this extreme, and has shifted to an "Arsacid era" of 247-48 B.C. By this the two key statues would be dated A.D. 70 and 136.³

Foucher's position, which has been argued also by Bachhofer from a different point of view,⁴ has in recent years been attacked by a group of scholars favoring a much later date for the statues and a different explanation of their classicism. For Rowland, Buchthal, and Wheeler, Gandhāran knowledge of classical forms came not so much by the survival of a local Hellenistic tradition as by a new contact with the culture of the Roman empire.⁵ Wheeler, asking that Gandhāran art be renamed "Romano-Buddhist," has emphasized a number of persuasive similarities between the clay or stucco heads of Northwest India and Hadda in Afghanistan, and "academic Western products of the second century."⁶ Buchthal has concentrated on iconographic and decorative parallels, showing for example the Gandhāran manipulation of the Cupid-and-garland motif, fashionable in the Mediterranean world of the second century.⁷ He has given weight to the assumption that a religious art seeking to lend greater authority to the figure of its Founder would inevitably turn for assistance, wherever there was knowledge of Rome, to the cult of the emperor in coins, reliefs, and portrait statues. For him "the first Buddha image ever

created originated in Gandhāra roughly about A.D. 100 after the model of an early Imperial toga statue."⁸ Rowland, analyzing the style of individual figures, has found the closest parallels to Gandhāran classicism in the age of Hadrian and Marcus Aurelius.⁹ Since the Roman hypothesis requires a second or third century date for the Loriān-tāngai and Chāsada statues, all of these authors have attacked the Foucher-Bachhofer chronology, pointing out the lack of evidence that a "Mauryan era" ever existed, or the unlikelihood that it (or Bachhofer's alternative, the Seleucid era of 312 B.C.) could have had any validity after three major invasions. Rowland has suggested instead an "old Saka era" beginning around 150 B.C., which brings the two dated Buddhas conveniently to around A.D. 168 and 234.¹⁰ All have called attention to the fact brought out by Marshall's methodical excavations at Taxila, that almost no evidence of a Buddhist art exists there prior to the beginning of the Kushan regime in the latter half of the first century A.D.

Within the "Romano-Buddhist" group, Foucher's belief in a Hellenistic survival has been countered by the evidence furnished by Scytho-Parthian coinage, which shows an almost total defacement of the Greek ideal.¹¹ At the same time an interest has grown in attempting to define the characteristics of Gandhāran art in the period prior to its subjection to Roman influence. Marshall has described a number of rather clumsy stone statuettes from Taxila datable by provenance around 30 B.C. to A.D. 40 in which he sees a strong Indian element.¹² Whatever Western quality the art of this period contained he ascribes to a knowledge of "monuments then still existing of the former Greek conquerors (and of) the many objets d'art from the Western world which the Parthians subsequently imported." Rowland also has signalled out a number of "Gandhāran primitives." In an early development of this theme he characterized his group as showing a rather nondescript mixture of Hellenistic tradition with Indian or Iranian elements.¹³ Two representative works of this sort I shall return to below, the stone plaque with donors around a preaching Buddha, from the Chapel L complex alongside the Dharmarājikā stūpa at

Taxila (pl. 31, A), and the stucco Buddhas between pilasters remaining on the ruined "Kaniška stūpa" at Shah-jī-kī-dhērī (pl. 31, C). The most constant feature linking these sculptures, and bringing into the group even an apparent alien like the portrait statue of Kaniška at Mathurā, is a kind of archaism, shown especially in a use of incised drapery folds rather than the emphatic ridges of the "Roman-Buddhist" phase. In a recent publication Rowland has revealed a new interest in the receptivity of the Parthian regime in India to fairly pure strains of Hellenistic culture, introduced to Gandhāra by the importation of artists or objects. From this somewhat altered point of view he has been able to explain the style of a number of stucco heads and minor pieces found in a late first century A.D. context at Taxila as being in most cases Hellenistic; or "in certain respects (as belonging) to that semi-eclectic recrudescence of earlier Greek sculptural styles that we associate with the art of Augustus."¹⁴ Since the dating of these pieces may fall on either side of the Kushan conquest of A.D. 65, Rowland vacillates delicately between an attribution to the Parthian regime that would involve a general philhellenism; and a suggestion that they belong to the first Kushan generation, which would underline "the strongly Augustan character of the sculpture (and make relevant) the known relations between Kujula Kadphises and Augustus."¹⁵

Although these recent explorations of the character of Gandhāran sculpture prior to around A.D. 100 have been rather confusingly divergent, they at least may be reconciled in so far as they describe an art whose variety in subject, style, and technical proficiency should clearly antedate the standardization of the "Romano-Buddhist" phase.

My own opinions place me unequivocally in the camp of Rowland, Buchthal, and Wheeler. Much of their work seems to me of the greatest value. If it has not yet led to a completely consistent explanation of Gandhāran art as a whole, the reason I think lies not in a mistaken premise, but in the fact that the arguments developed have been fragmentary, and sometimes have been pursued in an unfruitful isolation. Much attention has been paid to the Buddha figure, seated and standing (here by Foucher

and Bachhofer as well). Study has been devoted to the look of a great number of detached heads, and to iconographic and decorative parallels. But the Buddha figure is the most grudging witness possible to the secrets of Gandhāran development. Its physical type from the outset was governed by Indian peculiarities to which the classical ideal could never be fully accommodated. The same Buddhist canon, insisting on the repetition of one hallowed prototype, reduced to a minimum the receptivity of the image to stylistic change. One of its two stock variations, the squatting figure, was from the waist down preposterous by Greek standards. The Buddha costume is not Greek or Roman, but an Indian monk's robe, of prescribed dimensions and worn in a prescribed way. A comparison of heads, again, may reveal startling resemblances. But one difficulty is suggested by Rowland's admission that a presumed first century head of "Hellenistic" or "Hellenistic-Augustan" type from Taxila will look remarkably like "examples of sculpture from Hadda that can be dated largely in the fifth century."¹⁶ Another is revealed by the fact that the very "radiant face of an adolescent" that to Rowland "has a haunting resemblance to youthful portraits of Augustus" (and thereby helps to piece out his "Hellenistic-Augustan" theory) to Wheeler "irresistably recalls (the head of) the young Marcus Aurelius in the Capitoline Museum."¹⁷

Iconographic comparisons, finally, should in full fairness be made from a rich and well-balanced knowledge of the special interests and requirements of both parties. Buchthal's industry has revealed similarities that his evidently one-sided knowledge has led him to explain always in the same way, as signs of a docile borrowing from Roman precedent. To a testy Indianist like Coomaraswamy the whole procedure would have seemed ridiculous. In at least one case it has been pushed well across the borderline of absurdity.¹⁸

While admitting the importance of the material hitherto covered, I think it remarkable that so little attention has been paid (except by Buchthal) to the field of illustrative sculpture in relief. Such works not only make up the great majority of Gandhāran remains, but furnish the richest and most varied information

about the taste and capacity of Buddhist art in the Indian Northwest. Almost all reliefs contain the figure of the Buddha, and so may be used with the larger isolated images to study the central representational problem. Their small size makes them in general less valuable than the statues in tracing subtle changes of head modeling and drapery. On the other hand, since they involve groups of figures and the factor of environment, they reveal far more clearly, by their trend toward symmetrical placing and unnatural scale, the process by which the Buddha concept was progressively de-humanized. Gandhāran reliefs, again, raise and solve in different ways at different periods the basic problems of figure composition, of subject interest, of distribution of emphasis between figures and ornament or architectural frames. The phase of intensive indoctrination in Roman standards I find most forcefully demonstrated by a small group of stone reliefs of noticeably classical style. It is with these, and more generally with Kushan art down to the disintegration of the empire around A.D. 250 that the present paper is chiefly concerned.

Of outstanding interest is a pair of friezes now in the Calcutta Museum, long since published by Burgess and Foucher but by inadequate photographs that have partially concealed their quality. The two are nearly of a size, around five inches high. Both are unusually long, and lack any framing member across the top; their bases are simple broad mouldings of classical type. One, identified by Foucher as illustrating the home-coming of the Buddha after his Enlightenment,¹⁹ retains on one end a terminal member of the sort often used to separate Gandhāran relief panels, or to terminate the small frieze of an image pedestal (pls. 24, A, B). The degree of respect with which this miniature pilaster is made to approximate a classical norm gives generally some indication of the period. Here, although the member is as usual stunted and disproportionately wide, its sides are nearly vertical (where elsewhere they may show a marked splay). On the face, where often there is a sunk panel, this pilaster holds a childish naked figure in relief, with its hands clasped in prayer. The frieze as a whole is remarkable not so much for the carving of individual figures as for their arrangement.

The preserved stone shows four successive episodes without formal separation. The first and third center on a standing Buddha, the others on a squatting one. An extraordinary number of figures is provided, in at least three distinct planes, close-crowded but all standing on a common ground. The story demands no dramatic tension, nor even any pronounced movement, yet the figures reveal a constant search for expressive variation.

The details not obliterated by damage are interesting in various ways. One seat provided the Lord is a dais whose legs have the bulbous, turned mouldings familiar in Indian architecture. This use of everyday furniture, with the human scale of the Buddha figure and the smallness of his halo, speak for a period when he was still remembered as a teacher who walked among men. The accessory stools are the cylindrical type, originally of wickerwork around a wood frame, that appear through many centuries of early Indian art in association with a prince, god, or Bodhisattva.²⁰ On the other hand the guardian Vajrāṇi, shown standing behind the Buddha in the scene where King Śuddodhana falls prostrate before his son, seems to be wearing something like a *chlamys*, knotted in front like a shawl over his bare torso (or like the lion skin worn by the club-bearing Hercules). The Buddha's dress is rendered on his erect figure with a rare explicitness. The position of the right arm lifts and opens the outer robe, exposing a triangular section of under-clothing. From the knees down an under-skirt is visible. Across the right thigh runs a fold that marks the bottom of the intermediate garment, *uttarāsaṅga*, something like a short *chiton* that leaves the right shoulder bare (though this is of course hidden by the outer robe). Such concern for the literal exactness of monastic dress seems another sign of a relatively early date. The more emphatically divine Buddha of later times will be shown with only two visible garments, the outer robe and a narrow fringe of skirt at the ankles. The open triangle under the right arm will be closed; as if the shifting of cloth with the movement of the body, and the exposure of under-garments, were signs of an entanglement in the material world that could no longer be permitted in an icon.²¹

In the legs of the right-hand seated Buddha, again, there is another curious detail; an asymmetry of folds to which I shall return later.

The second frieze, which uses only the standing Buddha, involves more active scenes (pls. 26, A, B).²² At the observer's left is the quaint story of the dog who barked as the Lord entered, and who in the sequel was revealed as the reincarnation of the host's father. The middle group illustrates an episode in the conversion of the Kāśyapa brothers: their start of astonishment at being presented their venomous snake, tamed inside the Buddha's alms-bowl. Here, with less crowding in depth than in the "Homecoming" sequence, the individual figures have received more attention. They are carved in an extraordinary variety of poses. Physically energetic, the individual is caught at a moment of strong emotional reaction; at the same time the governing lines of his body are interlocked with his neighbors' to heighten compositional unity. The sculptor's interests are most vividly revealed in the figures of the Brahman ascetics and the nude Vajrapāṇi. Bodies and draperies are modelled quickly and surely, with an effective exaggeration in bulging muscles and sweeping folds. There is an almost complete indifference to ornamental effect. The jewelry that obsesses the later Gandhāran sculptor (like his contemporary in Palmyra) is omitted or slurred over. The skirt of a prince on the right runs down into jagged edges; but where this formula will in another century be used for ornamental enrichment, it here enhances rather the emotional expressiveness of the whole scene.

Can anything be said about the sources of this relief style? It has clearly almost nothing to do with the contemporary stone sculpture of Mathurā to the south. It is Indian in story, in iconographic details like costume and furniture, but in very little else. It has as clearly almost nothing to do with the type of art current in Parthia or the inland areas of the Near East under Roman control. As we shall see, the style of the Dharmarājikā relief (pl. 31, A) may recall first or second century sculpture at Palmyra or paintings at Dura by its combination of hieratic poses and ornamental elaboration; the lively humanity, the indifference to decoration shown by these Gandhāran friezes reveal a

diametrically opposite attitude. Again, there is no sign of contact with the "Neo-Attic" manner of the more Hellenized centers along the east Mediterranean littoral. Neither the columnar design of the "Asiatic sarcophagi" nor the latter's complement of studied figure posing in a single plane seems to have been practised in Gandhāra proper in the classicizing period.²³

I know only one part of the Western world in the century of Kushan magnificence that produced an art comparable in interests and methods to the Gandhāran sculpture analysed above: the west Mediterranean area centering on Rome. In the frieze sarcophagi that made up the bulk of the Roman sculptural output of the second century, there is the same manipulation of the human figure to the exclusion of almost everything else. There is the same delight in producing the illusion of a stage peopled by living actors. In consequence there is a like variety of poses, among which the rear view is exploited as a valuable accent. There is the same crowding of planes between foreground elements that stand out almost in the round, and the background.

The standing actors of the "Barking Dog" frieze might pass at a distance for those on a Roman sarcophagus illustrating the story of Alcestis.²⁴ Some of the figures in the "Homecoming" look almost like a provincial imitation at miniature scale of the Roman sculptor's drama of Achilles among the daughters of Lycomedes (pl. 25, A).²⁵ The little naked Rāhula posturing in front of the Buddha's throne might be one of Medea's or Phaedra's children. On a woman behind the dog are the damaged remains of a scarf, like those that billow out around the heads of the women who add excitement to the mourning for Meleager, or the sack of Troy.²⁶ The Vajrapāṇi, nude or clutching a skirt around his waist, is an acceptable Hercules. Though the squatting Buddha remains obstinately Indian, the erect one stands with the weight on the advanced leg and seems to sway forward with the dignified condescension of a Roman lord on a relief.²⁷ Similarity is even more noticeable in the long, low frieze of the Roman sarcophagus lid, where the diminished scale is close to that of the Gandhāran (pl. 27, A).²⁸

The fact that the Mediterranean and Indian worlds maintained close commercial contact by sea during the second century A.D. has been too well established to require more than a reminder.²⁹ I wish to point instead to the more specific evidence that Rome was visited several times during the earlier second century by embassies from the "Bactrian" regime. Thus in its account of Hadrian's reign (117-38) the *Historia Augusta* summarizes the conciliatory measures he adopted toward the Eastern powers, and ends with the statement that "the Bactrian kings sent to him envoys as suppliants for his friendship."³⁰ Another Roman source speaks of the envoys sent to Antoninus (136-61) by the "Indians, Bactrians, and Hyrcanians."³¹ I suggest that one such mission secured at the capital the services of a master sculptor, who was escorted back to Peshawar to lend a properly imperial note to the rapidly expanding art of Gandhāra. No known evidence exists to prove such a claim. Witnesses to its plausibility are, on the one hand, the visible character of Gandhāran sculpture; and on the other, the well attested fact that just such an importation of Western talent was welcomed for the top-most level of Indian architecture at this same general period. The apocryphal *Acts of St. Thomas* relate his purchase as a slave in Jerusalem to direct the construction of a palace for the great East Parthian king "Gundaphorus," predecessor of the Kushans by less than a century in Northwest India.³² What may not have been literally true of Thomas must at least have been a situation familiar enough to permit such exploitation in the Christian literature of the Near East. To the same purpose might be cited the Indian texts that speak of the use of "Yavana" (Greek-speaking) carpenters in South Indian palace architecture, and that dwell admiringly on the cunning of "Yavana" craftsmen in general.³³ In the first large-scale attempt to reach India by sea, at the end of the second century B.C., Eudoxus (whose two previous journeys must have given him a good idea of Indian demands) is said to have carried artisans as well as merchandise.³⁴

For the approximate date at which my hypothetical sculptor was brought from Rome to Gandhāra, the technique and design of the two friezes in Calcutta offer a general indication.

The figures of the "Barking Dog" relief, in especial, have the liveliness of pose and the striking compositional axes that characterize numerous Hadrianic sarcophagi. This is particularly noticeable in the grouping of the three Brahmins just to the right of the table (pl. 26, A). The strong triangle formed by their legs recalls the stock Roman presentation of the Dioscuri, or the Erotes who symbolize the Seasons.³⁵ That neither here nor elsewhere in Gandhāran sculpture is there any sign of the drill suggests that the Roman fashion imitated predated the mature Antonine style. A pinpoint precision is of course impossible, but some time within the second quarter of the century would suit both the Roman historical evidence and the look of the sculpture.

The uncertainties of Kushan chronology make it impossible to assign this period with absolute assurance to any one part of the Kushan dynasty. It is interesting that the Roman record remembers embassies from "Bactrian kings" during the period 117-38. If Kaniška came to the throne in 128, as a powerful body of opinion now maintains,³⁶ the (presumably) two monarchs referred to would have been he and his predecessor: perhaps Wima Kadphises, perhaps the mysterious "usurper" Jihonika.³⁷ Either Kaniška or his son Vasiška could have continued the contact with Rome under Antoninus.³⁸

If the Roman sculptor ever completed any works of his own on Indian soil, they were doubtless obliterated in the destruction of the Kushan capital that made so complete a wreck of the huge "Kaniška stūpa." He must have trained assistants, one of whom (from the quality of the work) may have been the artist of the "Barking Dog" frieze. Unquestionably he brought with him a stock of workshop cartoons, covering much of the repertory of the Hadrianic renaissance. A great deal of this was surely too irrelevant for any use in his new environment, and so disappeared without trace. Portions of it were adapted to a variety of purposes, some to be discarded after the first generation, others to remain popular for centuries. First in the latter category must have been the newly idealized Buddha type, as it is seen for example in the seated figure of Berlin (pl. 25, B), with a cool neo-classic face and flowing three-dimen-

sional draperies. From the Roman drawings, again, may have been taken a decorative motif destined to survive throughout the later course of the Gandhāran style, the frieze of Erotes holding a garland (pl. 28, A). Kushan taste of the later second century, indifferent to ornament in general, seems to have accepted this convention with enthusiasm. The reasons may be two-fold: its factor of human activity on the one hand; and on the other the ease by which it could be assimilated to the Indian tradition of offering garlands as an act of worship.³⁹

Of the more ephemeral borrowings, several merit attention for the vividness of their Roman coloring. A fragmentary frieze now in the Lahore Museum from Sikri that shows four standing Buddhas (presumably from the canonical group of seven) combines several classicizing details (pl. 28, A).⁴⁰ A base member extends the Cupid-and-garland motif in its richest form, with a human figure at bust length in each loop. One Cupid is shown from the rear.⁴¹ The Buddhas stand frontally, to be sure, for iconographic propriety; but their drapery folds run with a drastic asymmetry from thigh and hip to opposite shoulder, far more in the fashion of a *pallium* than with the hieratic formality of the later standard. In two adjacent figures the folds across the legs even run in opposite directions, for greater liveliness. The haloes are of moderate diameter. Between each pair of Buddha heads there emerges from the background plane the bust of an attendant at the same level (the convention found so useful in the Latin West that it was still exploited for Christian illustrations in the fourth century). Behind and above is stretched a curtain, hanging in long loops between each pair of Buddhas. It can hardly be a coincidence that this last addition had been used in Rome to give a rhythmic interest to the background of a comparable figure series, the Nine Muses; or with a greater solemnity had hung behind the formal groups of a husband-and-wife sarcophagus like the version in the Vatican Belvedere (pl. 28, B).⁴² Even the disproportionately small worshippers who stand or kneel between the Buddhas' legs (and who in this relationship are as unusual in Gandhāra as the curtain) may have their source in the child often added to

the Roman marriage group. That the curtains at the top should show in each loop the bust of a deity throwing flowers, on the other hand, seems a sacrifice of a spatial logic, no longer clearly understood, to the requirements of Buddhist story.⁴³

The frieze of naked children dancing and wrestling that furnishes so apt a base to the large sculptural group of Pāñcika and Hārītī from Sāhri-Bahlol (pl. 29, A), must be derived from the widely used sarcophagus theme of playing Erotes.⁴⁴

The Gandhāran collection of the Royal Ontario Museum of Archaeology, Toronto, includes one remarkable frieze fragment with a row of six laymen (pl. 27, B). Probably they are Kushan donors, in an Iranian dress. They are heavily bearded, and wear their hair in a variety of elegant curled coiffures. Manifestly they are gentlemen in an age of wealth and sophistication, who handle their swords like *mousquetaires* out of Dumas. They stand with the nonchalant ease of figures on a Roman frieze, turning this way and that, raising their hands in the stock gestures of conversation; they are as different as possible from the stiffly frontal, identically rendered Kushan lords at Mathurā. I am tempted to believe that the idea of rendering a row of donors in this way was suggested by a cartoon from the imperial workshop, presenting (once more) the Muses as a roughly similar problem of figure spacing.⁴⁵ If this were so, the curiously placed arms of the profile figure at the center, which now seem inexplicable, might acquire meaning as a transcription of the gesture of Apollo sweeping his lyre. More sure is the derivation of the next figure to the right. This can be only the pose of the sorrowing barbarian captive as it is seen, for example, on Roman battle sarcophagi.⁴⁶ That it should have been so innocently borrowed here is one of the small jokes of art history, perhaps even perpetrated by the Roman master himself. It is of course clear that the small decorative figure in the panel on the far left was taken from the Roman Eros found sometimes in an analogous position (pl. 28, B). Only the pot below him and the branches above reveal an attempt to assimilate the loan to the older Indian formula of the tree-nymph.

One last noteworthy example of derivation

from Roman cartoons⁴⁷ concerns a unique specialty of the Gandhāra school, the large stele type that illustrates the scene of a visit to the Buddha seated in meditation in a cave.⁴⁸ Most of the small number of examples preserved almost entire or in fragments tell the popular story of the descent of Indra and his heavenly host, the *Indrasailaguha* (pls. 30, A, B). One fragment shows instead the visit of a group of Brahman ascetics, the sixteen Pārāyāṇas (pl. 29, B).⁴⁹ The theme had been known in earlier Indian art, where it had been handled inconspicuously, with just enough details to make identification possible. It is of extraordinary interest for the history of Gandhāran Buddhism that the "Visit" should have been received there at least for a time as a subject of first importance, to be presented with exceptional emphasis and elaboration. In the fully developed Gandhāran versions, the mountain setting of the cave is rendered with a picturesque realism of rock structure, trees, birds, and animals, to form something like a large stele. The visitors are characterized with an equally alert eye for details; in one alternative the gay pageant of Indra's host and even the great god's elephant mount, in the other the ragged, gaunt ascetics. The Buddha, in contrast to both, is superhuman and more than divine in his size and in the untroubled purity of his contemplation.

In another publication I have recounted at length the probable reasons why the idea of a visit of worship to the Buddha within a cave should have been so signally honored in Gandhāran sculpture.⁵⁰ I have pointed to the proximity, at Hadda in Afghanistan, of one of the great pilgrimage centers of the ancient Buddhist world, developed about that miraculous cavern in which the Buddha was said to have left his "shadow" as a testimony for later believers. In a more fundamental sense, I have tried to interpret both the Shadow Cave and the "Visit" stelae as tributes paid by a cosmopolitan Kushan Buddhism to the great central idea of Gnostic belief: the presence of the divine principle, spirit, light, and goodness, in the deepest darkness of the evil world of matter. In the present connection I wish only to point out again that the stele type bears an astonishing likeness to certain highly developed second century Roman presentations of the "Tauroc-

tony," the ritual slaughter of a bull by Mithra within a cave. There too appear the miniature mountain, the cave mouth, the picturesque details of flora and fauna, assembled for Mithraic use from the repertory of the "Alexandrian" relief style (fig. 1).⁶¹ The likelihood of



FIG. 1.

a direct borrowing seems the greater from the fact that Mithra occupied in the Kushan world a position quite as lofty as in his Roman cult. If he and the Buddha were in a racial sense adversaries, within the syncretic environment of the Northwest they were also the two personifications of divinity whose individualities were the readiest to merge.

A fixed point in evaluating the group of "Visit" stelae in the general evolution of Gandhāran sculpture is given by the stone from Mamāne-dherī, which bears an inscription dated in the 89th year. This means unquestionably the Kushan era, and by the chronology that seems to me most acceptable corresponds to A.D. 216. Stylistic comparison is most profitable with the closely similar stele from Jauliāñ (pls. 30, A, B). In every respect the former is the more formal of the two. Its cave has been regularized to an almost triangular form with a

strong horizontal across the base. The details that break up its mountain tend to separate into tiers and to diminish systematically toward the top. In the Buddha, the legs form so emphatic a pedestal that they seem to have no anatomical relationship with the torso. The overlap of the robe across the legs is a symmetrical series of concentric curves. The folds above have flattened into thin ridges, regularly spaced, and fall from the right side of the chest with the formality of catenaries. The left arm develops a series of folds all of the same kind, which merely straighten out as they approach the shoulder. The shallow collar gives no suggestion of an overlap of cloth. The beautiful head cannot be compared with Jauliāñ's, which has been destroyed; but it is in keeping with the rest that the hair is drawn in a fairly hard line across the forehead, and is dressed in thin, almost metallic waves. The lower edge of the upper eyelid seems to be a simple, continuous curve. The halo is markedly larger than the shoulders.

The Jauliāñ stele is more varied and picturesque throughout. Special attention should be paid to the more natural articulation of the Buddha's legs; and to the different arrangement of folds on the left arm, where a marked change of direction occurs at the elbow. Modeling emphasizes a turning of the torso back into the arms, and a real overlap of the collar. The figures of Indra's retinue below move with a freedom like that of the "Barking Dog" frieze, facing in every direction and creating strong contrasts of axial lines.

The Takht-i-bāhai fragment with the Brahmans is clearly very close to the other two, and must have proceeded from the same atelier. Details are derived from a common source, as for example the figure in armor (*Vajrapāṇi*?) part way up the mountain on the Buddha's left, the crouching ape, the animals in their den, the umbrella-like trees. The style seems to fall between the extremes represented by Jauliāñ and Mamāne-dherī. The Brahmans, half crouching in humility, with their wiry, emaciated bodies and skirts sagging in a long triangle between the legs, are obviously related to their fellows on the "Barking Dog" relief (although their execution is less vigorous).

The Sāhri-bahlol fragment, framed below by

a frieze of donors about a seated Bodhisattva, is too damaged for any comprehensive analysis. What remains of the Buddha is rendered with a linear crispness exceeding even that of Mamānedherī, and so probably later. From an iconographic standpoint, the elaboration of the original design by the secondary theme of worship of a miniature Bodhisattva (borrowed from the typical developed icon pedestal) also points to a fairly advanced date, perhaps around the middle of the third century.

The Loriyān-tāngai stele in several respects—its crowding of figures without reference to ground levels, the stiff symmetry of the whole composition, the formality of the Buddha, the emphasis on decorative patterns—testifies to so altered a point of view that I place it latest of all, as transitional to the late phase of Gandhāran sculpture.

Of the whole group, the Jauliān stele is closest to Roman standards, and so may be roughly assigned to around A.D. 175.⁵²

Detailed analysis might well show that a number of the classicizing decorative motives used by Gandhāran sculptors came directly from Rome (rather than from a local Hellenistic tradition, or the Near East). This seems most likely in the case of the Cupid-and-seahorse frieze, since the Gandhāran adaptation so closely parallels Roman sarcophagus lids of the second century.⁵³ Rather than extend my study into such byways, I prefer to point to the effective employment on a number of Gandhāran reliefs of the rear pose. The result there gives the same happy combination of spatial plausibility and compositional accent as on Hadrianic sarcophagi. The figure type most frequently found in such service, with the torso in a seven-eighths view and the weight on the farther leg, could pass (particularly when nude or wearing a *chiton*) for the work of a Roman sculptor.⁵⁴ It is interesting that this pose seems to have been allotted most frequently to the Vajrapāṇi, a deity whose physical type could be assimilated to that of Hercules, and whose very function as the Buddha's protector was perhaps non-Indian in origin.⁵⁵

The emphasis that I have so far given to borrowing from the West accounts for only a part of the complex picture of Gandhāran art. The Roman Orient as well may have exercised

some less clearly identifiable degree of stylistic pressure, through the export of objects or workmen. Even in the generation when Kushan susceptibility was at its height, again, local traditions and native interests were still capable of an obstinate resistance. The Gandhāran sculptor, appreciating what was specifically Western in Roman relief—its dramatic realism—rejected what was most patently classical: virtually all of Greco-Roman traditional subject matter (except for minor themes admitted as decoration), and the greater part of the academic repertory of poses. The Kushan was interested in the pretense of life, not in canons of proportion or anatomical correctness. I am sure that a naked Vajrapāṇi, seen from the rear, was placed alongside the clothed Buddha in the "Barking Dog" frieze because the aptness of the device could be seen in Roman use. But the Gandhāran nude quite lacks the stereotyped rhythms of the Hellenistic athlete; he poses rather with a frank, male awkwardness. The three Brahmans in the same group may stand in a triangular relationship derived from the Hadrianic repertory, but their attitudes betray an indifference to a first principle of classical design. Their triangle is not self-contained, by inward-turning glances and gestures; nor does it expand symmetrically on either side, as in the most agitated Roman friezes. Instead it is simply directed as a unit toward the Buddha alongside. The fact is obvious that the complex interlocking of bodies found in the best Hadrianic and Antonine sarcophagi represented an interest so unfamiliar in India that it could be transmitted only in fragments.

The number of Gandhāran stones that show a dominant classical coloring is small. The majority of remains, even in that portion which seems to fall roughly within the Kushan imperial age, presents marked modifications of style or iconography, usually with a decline in technical proficiency. A typical example is a relief in the Calcutta Museum published by Foucher.⁵⁶ The Buddha is there notably taller than the rest, so that two tiers of adoring figures are required to reach his height. The upper tier is perhaps filled with gods, who are legitimately independent of a ground line; but their presence helps to destroy the sense of a stage with living actors. Over the terminal pilaster appears the

wide Indian bracket, with proportions based on the use of wood.

In a fragment from Jamalgarhi showing the Temptation of the Buddha by Mara and his daughters, the framing pilasters are not only topped by the same sort of bracket, but have an emphatic splay.⁵⁷ The figure group has a more static, posed quality, stressed by the narrowness of the panel. The figurine on the face of one pilaster is the praying Eros type that I suppose was the original loan from the Roman repertory. The other has been Indianized into a voluptuously posed female. In this last respect a relief from Sāhri-bahlol illustrates a further advance: the repertory of pilaster figurines has been extended to take in the Buddha himself, in an attitude of meditation.⁵⁸ This stage seems typologically close to the well-known Gandhāran stone capitals, whose luxuriant Corinthian details are countered by an Indian width and squatness; there too a small Buddha sits or stands among the acanthi.⁵⁹

Provincial imitations from sites like Natthu, the Sanghao monasteries, or the upper Swat valley, continue the Kushan formulae in work of much greater crudity.⁶⁰

In the field of the large, isolated image I have found no standing statues to illustrate the first phase of Roman influence. The classicism still evident in the Buddhas from Loriyān-tāngai and Chārsada has been ably analysed by Rowland and Bachhofer.⁶¹ In comparison with the Buddhas of the "Barking Dog" and the "Homecoming" friezes, however, both figures show an advance toward formality in the hang of their drapery folds. On the friezes the loops descend in a series from the right side of the chest to the calf of the left leg, with their low points following a fairly continuous line of slight curvature. The formula seems an adaptation of the more flexible and complicated fold system used by Hadrianic sculptors for the *chlamys*.⁶² In contrast the Gandhāran statues present a clear break between the folds—still asymmetrical—across the torso, and those that hang almost symmetrically between the legs. They seem to represent thereby a halfway stage toward the final schematization of the "Udyāna image" type, whose folds are symmetrical about a vertical axis from collar to hem.⁶³

The two statues use a three-member pedestal

type, in which the waist member is a small frieze with terminal pilasters. Both friezes contain a small squatting Bodhisattva adored by standing laymen: an idea that may have grown up in the Mathurā school, since it is attested there by several stelae of the period.⁶⁴ If anything reveals that the Loriyān-tāngai image is closer by sixty-six years to the age of contact with Rome, it is perhaps the fact that it retains as pedestal top a common classical base member, the torus enriched by imbrication. Its pilasters, too, though stunted and topped by the crudest capitals, are at least vertical, and the sinkage at the center is slender and unobtrusive. In the Chārsada socle the pilasters are splayed, and the center panel is both larger and is made more noticeable through its enclosure by half circles at top and bottom.⁶⁵ The crowning member of the base is divided into bands that vaguely recall the orthodox architrave and frieze, and is decorated by a simple saw-tooth motif. This design as a whole is the better organized of the two; the Loriyān-tāngai pedestal with its disproportionate torus seems to stand for an experimental stage. As to date, since no chronological system is as yet unassailable, I am reduced to allotting the statues roughly to the third century A.D.⁶⁶

The handsome seated Buddha in Berlin, from Takht-i-bāhai, has received a careful stylistic analysis by Bachhofer.⁶⁷ Believing that it should be assigned to the period of Roman influence, I wish to point out a few details of special significance (pl. 25, B). The comparative humanity of the Buddha type, and thus its relatively early date, are attested by the moderate size of the halo, the rich heaviness and mobility of the drapery folds, and the realism of the dais. Notable as tributes paid to an ideal of at least partial verisimilitude are the bulge in the skirt that reveals the sole of the foot hidden underneath; and the fact that the folds across the left arm change the direction of their curves at the elbow.⁶⁸ The seat is a ruler's "lion throne," with cushion, cloth cover, and terminal beasts, comparable to the seat of the Kushan image of Wima Kadphises at Mathurā (except that its proportions have been adapted to the squatting figure, and that the lions are more classical).⁶⁹ There is, in other words, no formal pedestal like the type used in the Loriyān-

tāngai and Chārsada statues, and generally adopted for later squatting figures as well; with miniature figures in the frieze to emphasize by subject and scale the iconic character of the whole.

One surprising feature in the drapery of the Berlin Buddha warrants special attention. Over the part of the right leg that is shown, the folds are drawn with a complete disregard of the natural effects of anatomy and weight. The curves that they describe are those that might form on the leg of an erect figure wearing something like loose trousers. This oddity is virtually unknown in the rest of Gandhāran sculpture, where both right and left legs are given similar fold systems, fanning out and downward from the calf. As I have noted, however, it exists on one of the squatting Buddhas of the "Homecoming" frieze (pl. 24, A); and it reappears on Mathurā Buddhas wearing the same dress.⁷⁰ Where did it originate? One would suppose not in Mathurā, where the Buddha in the Gandhāran-type robe is always exceptional, and seems to betray its derivative character by an unusual awkwardness. Not, certainly, in a Gandhāran art under strong Roman influence. The phenomenon is most readily explained in the context of the pre-Roman phase, when the Buddhist art of the early Kushan regime was produced in a mongrel style not unlike that found further to the west in the period between the collapse of the Seleucids and the imposition of Roman standardization. In such an art, a compound of surviving Hellenistic formulae with the reviving preferences of the Indian and Iranian worlds—an art meticulous in rendering ornamental details and quite unconcerned with the illusion of natural life—the squatting Buddha figure would have been a problem for which the inherited Greek repertory offered no complete solution. The tightly locked legs, and the folds of drapery across them, had to be invented. I am sure that the Palmyrene sculptor who could render the hang of a *himation* by a series of scallops down each leg, would have transferred the formula without a second thought from his erect figure to the horizontal legs of the Buddha (pl. 31, B).⁷¹ The presence of this archaism (to use Rowland's word) on the Berlin statue, which in other respects is so strongly classical, may indicate a very early

date in the "Romano-Buddhist" period, perhaps the third quarter of the second century. The statue, in other words, is probably to be explained as the work of a native sculptor who had mastered the tricks of the new style, but who did not as yet recognize that they demanded a complete recasting of the traditional form.

I offer this suggestion with less than complete confidence because the same incongruous feature occurs on a small number of Buddhas in relief, which I cannot place earlier than the third century. The problem, with a similar one raised by another "heterodox" drapery formula, will be discussed below. First, however, to highlight the qualities proper to the first generation of "Romano-Buddhist" art, I wish to re-examine a relief in which the pre-Roman phase is represented at a fairly high level of sculptural competence: the plaque with a preaching Buddha and donors from Building L in the environs of the Dharmarājikā stupa, at Taxila (pl. 31, A).⁷²

The plaque is remarkable for the care with which faces and costumes are individualized. Each donatrix is rendered as a realistic portrait, with her own chosen way of doing her hair, her jewelry, her robe (that on the oldest woman half covers even the feet, while with the younger the ankles are coyly bared). Even the Buddha's face, with its heavy eyebrows and moustache and its look of shrewd good humor, is that of an individual, who in profile on a coin might look not unlike the Saka "Heraus."⁷³ Absence of religious formality is revealed by the small halo and the realistic seat. The disproportionate size of the raised hand speaks with a naive expressiveness; the perfunctory drapery lines show an indifference to classical values. The figures, for all their variety in detail, stand in almost identical three-quarters poses, in the superimposed tiers normal in non-classical art.

That a major component of Gandhāran sculpture at this stage was a style common over much of the Near East is attested by the analogies between the Dharmarājikā plaque and the earlier sculpture of Palmyra. A Palmyrene lady on a tomb slab of the first or second centuries A.D. might match her sisters to the east in veil, jewelry, and modest dress (so unlike the

Indian), or in the formality of the representational ideal she embodies (pl. 31, B).⁷⁴ In the Buddha figure, on the other hand, a detail is introduced that raises a more puzzling problem. The right knee is here completely covered by an overhang of the robe from the right forearm. This is the second "heterodox" formula I have referred to above. Its distribution is very much wider than that of the scalloped leg folds, and has at least a partial consistency. It is lacking in almost all the Gandhāran Buddhas of the "Romano-Buddhist" period proper. It is standard in Mathuran Buddhas wearing the Gandhāran-type robe (being in at least one example combined with scalloped leg folds).⁷⁵ It is the rule also in Afghanistan, and can easily be traced into Central Asia and the Far East.⁷⁶ It is frequent, finally, in the late Gandhāran style.⁷⁷

I cannot at present satisfactorily explain the origin of this feature. When, as on the Dharmarājikā plaque, the overhang is shown tucked well under the knee, it implies a severe limitation on the use of the right arm. Perhaps such a limitation was intended, to encourage (like the locked legs) the immobility necessary to meditation. The "sleeve"-over-knee formula was used primarily with the *abhaya mudra*, a formal gesture that involves the minimum of movement. When an iconographic type was created to represent the freer activity of preaching, the right shoulder and arm were bared, and the "sleeve" disappeared. That functional alternative is seen at Amarāvati, in the Gupta style generally, in the late Gandhāran preaching Buddhas, and in the active seated Buddhas of the Kucha style paintings.

Two Mathuran examples of the "sleeve"-over-knee formula are dated.⁷⁸ The presumed later of the two, the Buddha of a 22nd year interpreted as A.D. 249, is the more conservative, since the various drapery elements still show a crudely rendered, but logical asymmetry. The second, from the 51st year, interpreted as A.D. 178, has already the full symmetry that the Udyāna type would assume in a squatting pose. The folds over the torso fall regularly about a vertical axis from base of neck to navel. Their descent continues in a centralized overlap of skirt. To the outer arc of this last the right "sleeve" overhang is almost tangent; while the

treatment of the left leg is balanced as closely as the different action of the left hand permits.

The Buddha of the Dharmarājikā plaque bears witness to the presence of the "sleeve"-over-knee detail in early Kushan iconography. The disappearance of the feature in the Romanizing phase of Gandhāran sculpture I ascribe to aesthetic disapproval of its concealment of the anatomical relationships between arm, trunk, and thigh. That it continued in Afghanistan seems to me an indication that that region was less affected by the classicizing reform than was Gandhāra proper. The fact that the late stucco Buddhas at such sites around Taxila as Mohrā Morādu, Jauliān, Pippala, and Kālāwān, are as consistent in its use as those around Hadda may substantiate the theory that I hope to develop in a sequel: that in the fourth and fifth century Gandhāra lay under the cultural dominance of the Hadda region.⁷⁹

There remain a small number of Gandhāran reliefs that I ascribe to the third or early fourth century—prior to the wholesale importation of architectural frames and figure types from Afghanistan—in which the two "heterodox" drapery formulae appear. Scalloped leg folds may be distinguished on all the squatting Buddhas of the reliefs from the Sikri stūpa, for example.⁸⁰ The simplest explanation here would be a deliberate conservatism, carrying back to some pre-Romanizing iconographic original. The Sikri reliefs substantiate this by retaining early features: a "Scythian" head type for the Buddha not unlike that on the Dharmarājikā plaque; a fairly correct Corinthian colonnette as terminal motif. Provincial backwardness probably explains the use of the "sleeve"-over-knee formula in a clumsy relief from the highland monastery of Sanghao.⁸¹ On the other hand both "heterodox" forms are used in combination in the highly finished local style of Lauriyān-tāngai, whose ornamental emphasis and multiple tiers of figures show a new ideal superseding the classical. One Lauriyān-tāngai Buddha reveals the "heterodox" combination symmetrically distributed on both legs.⁸² Curiously enough an effect of the same sort is attained on both legs of the much more classical Buddha of the "Visit," from Māmane-dherī (pl. 30, B). It seems to me not impossible that this sort of concession to formality was made under

the pressure of new ideas originating in Mathurā. We have seen the full symmetry of the Udyāna Buddha type already stated in a Mathuran seated figure of A.D. 178. The "Udyāna image" was the first to be signalled out in Buddhist literature, and there was uniquely honored for its divine origin. Its iconographic canon, assembled in Mathurā during the Kushan period, helped to formulate the ideal Gupta Buddha, and won even greater prestige in Central Asia and the Far East. The Gandhāran sculptors held out against its full rigidity to the end, at least in their insistence that a robe thrown across the shoulders should hang asymmetrically on the body. They surrendered early where it was natural to yield, in the fall of the skirt between the legs. The Māmane-dherī Buddha of A.D. 216, carved in a generation when classicism was no longer fresh, seems to mark a stage of capitulation with unusual clearness, by borrowing a specific Mathuran drapery detail.

It should be noticed, finally, that the hypothetical evolution of Gandhāran art that I have traced above during the first three centuries A.D., may be roughly substantiated by a study of Kushan coinage. After the long corruption of the Bactrian Greek types, and the introduction of Indian and Persian iconographic elements in the last two centuries before Christ, the coins preceding the Kushan invasion are a monotonous repetition of crude drawings and blurred impressions. In contrast the portraits of the first Kushan rulers are rendered with as vivid a realism of face and costume as the Dharmarājikā plaque.⁸³ Under Kaniška and his successors the casting becomes more delicate and conventional. The rulers shown are less individuals than general personifications of military power. Classicizing deities, of the type of Hercules or Dionysus, may occasionally be rendered with a skill at least comparable to that of third century Rome.⁸⁴ The climax of this development is reached in the issues of Huviška, the contemporary of Marcus Aurelius. One of his coins has on the reverse a mailed goddess of the Athena type, with a four-letter Greek legend that seems a corruption of "Roma."⁸⁵ Another points to a more specific contact with the West by naming its male deity "Sarapo," the Alexandrian Serapis.⁸⁶ Most curious is a coin that shows a trinity of gods, the Hinduist

Skandha and Viṣākha attending a central, frontal Mahāsena under an *aediculum*.⁸⁷ The architectural frame is the Indian truncated gable; the design across the pedestal is a wavy line that may stand for the garland motif. But the whole design is remarkably like that of a Hadrianic piece showing a frontal Hercules between two female attendants, inside an *aediculum* with a horizontal top.⁸⁸ A Western derivation is placed almost beyond argument when one discovers that while the tiny Skandha faces his superior in a conventional three-quarters pose, Viṣākha is seen from the rear. The device is unimaginable in Indian coinage except in second century Gandhāra, at a time when stone sculpture could take forms like those of the "Barking Dog" frieze; and when the Kushan rulers were familiar with Roman coins that showed a god or even the emperor from the back. Two other issues of Huviška use the rear pose for a mailed warrior in classicizing armor, with a legend that may include a barbarized "Ares."⁸⁹

On the other hand equal significance and more prophetic value attaches to those coins issued under Huviška that show him riding an elephant, squatting on a cushion like a Persian shah inside a solar nimbus, or lounging on his throne like an Indian rajah.⁹⁰ His non-classical deities may include a moon god with four arms, or a Śiva with four arms and three heads.⁹¹ With the last emperor, Vāsudeva, a few coins retain a classicizing grace and delicacy; but the collapse of the dynasty is reflected in a general lapse into clumsiness and monotonous repetition. Changing political fortunes are reflected finally in the appearance of coins of an entirely new type, the Sasanian.

The peculiar factors governing numismatic history make it impossible to set up a strict parallelism between the evolution of coinage and that of other arts. Gandhāran sculpture experienced in the third century no such sudden stylistic collapse as did the products of the Kushan mints; nor could a Buddhist art reveal anything like the degree of Persian supremacy asserted by a coin. A recognizable element of Roman classicism survived in the Gandhāran Buddha figure through the fifth century. At the same time it is clear that the interests of the fourth and fifth centuries were as a whole very

different from those of the second. I hope to analyse and so far as possible to explain these changes of style and iconography in a second paper.

Excursus

So much of my argument has presupposed the validity of earlier studies in the Gandhāran field that I think it advisable to point out two or three instances in which I cannot accept attributions to the period I have covered above.

Following Rowland in so many particulars, I must reject from his group of "Gandhāran primitives" one important monument; the stucco seated Buddhas on the remains of the basement of the "Kaniška stūpa" at the modern Shah-jī-kī-dherī.⁹² Rowland's published photograph of a row of these figures gives well enough the detail on which his decision seems to have been based; a rendering of drapery folds across the torso in the same sort of "meaningless incised swirl" as in the portrait statue of Kaniška at Mathurā.⁹³ A view of the same group from the front, however, shows features quite incompatible with an early date (pl. 31, C).⁹⁴ Each Buddha has not only a large halo, but a sun-disk vesica as well, a feature common in the late style of Hadda and at Bāmiyān but virtually unknown in India proper. The feet are exposed and the seat is a lotus, as in only the latest Gandhāran Buddhas done under Guptan influence. All that remains of Gandhāran tradition in the robe is a shawl collar so formalized that it seems a separate scarf. I know no close parallels; so far as the poor photographs permit a stylistic comparison, they suggest the stucco figures of Chinese Turkestan as much as anything.⁹⁵ I believe, then, that instead of being "archaic" these crude effigies belong to a very late phase of restoration, shortly before the Moslem conquest put an end to Buddhist art in Gandhāra for all time. The Chinese pilgrim Hsüan-tsang found the "Kaniška stūpa" in the process of rebuilding in the early seventh century. A Korean of the early eighth describes the whole Afghan-Gandhāran region as being peopled by *Hu* (i.e. a predominantly Iranian stock?), and ruled by a Turkish chief with an army of his own race.⁹⁶ It might even be argued that a "meaningless incised swirl" was a Central

Asian feature, appearing in India once in the portrait of a conqueror, Kaniška, whom some historians have tried to make a native of Khotan; and reappearing much later in an age of thorough racial confusion.⁹⁷

I am less certain that Rowland is mistaken in adding to his list of primitives the erect stucco figures from Stūpa R, 4, near the Dhamarājikā Stūpa at Taxila.⁹⁸ He speaks again of incised folds, and points out the second century "large diaper" masonry against which they have been plastered. The groups are in a state of dilapidation that should make any decision about them a hesitant one. I tend to agree with Bachhofer, who sees in them "shadowy patterns (in which) there is nothing to be felt of the rugged strength which distinguishes the images from the beginning of the second century A.D."⁹⁹ Where his early dating assigns them to the end of that century, however, I am inclined to place them considerably later. In some places the drapery folds show a typical late antique corruption; across the torso of a Buddha they approach symmetry. Two figures wear their right arms in the pallium sling fashionable at Hadda, and imported into Gandhāra with the other paraphernalia from Afghanistan in the fourth or fifth century. The relative impermanence of stucco makes it by no means unlikely that a stūpa erected in the early second century should have been redecorated at a later period.

All the Buddhas and Bodhisattvas, finally, that Bachhofer has assembled from Sāhri-bahlol and Takht-i-bāhai to place in the "latter half of the first century A.D." I should prefer to see in the late third or fourth.¹⁰⁰ The figure style is pervaded by a linear hardness and a new interest in the ornamental possibilities of hair, jewelry, and skirt folds. The haloes are large; the two squatting figures are set on pedestals whose iconography is more advanced than that of the Lauriyān-tāngai and Chārsada type.¹⁰¹

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¹ A. Foucher, *L'art gréco-bouddhique du Gandhāra*, (Paris 1918) (hereafter referred to as *Gandhāra II*) 401 ff.; and *La vieille route de l'Inde de Bactres à Taxile*, (Paris, 1942) II, 306 ff.

² *Ibid.* 319.

³ *Ibid.* 341, following Konow and Luders. Note that one of the prime difficulties admitted by Foucher in erecting a plausible Gandhāran chronology, the non-classical look of the "Kaniška reliquary" (*Gandhāra* II, 440 ff.), has been settled by M. D'Ancona's demonstration that it must have been the work of an artist from the Mathurā school. See her "Is the Kaniška Reliquary a Work from Mathurā?" *ArtB* 31 (Dec. 1949) 321-323.

⁴ *Early Indian Sculpture* (New York, n.d.) I, 67 ff. The Loriyan-tāngai Buddha, ascribed to A.D. 6, "unmistakably manifests a clear and uncorruptible sense of reality, the legacy of Bactrian Hellenism." Bachhofer's further analysis of the Gandhāran school traces an evolutionary path of remarkable complexity. Already in the Chārsada statue, dated A.D. 72, the Orient has replaced the Occident as a major influence. In the second century the style becomes "extremely debased" (87). From the third on there is a trend toward picturesque optical effects, best gained in clay and terra cotta. Coincident with the establishment of the Sasanian Empire and the severing of contacts with the Roman West, the Gandhāran artists begin to achieve a renaissance, by imitating the style of the later first century. The framework for this hypothesis seems to be the familiar European sequence, Classic-Baroque-Neoclassic; its applicability is highly questionable.

⁵ Two recent publications have reviewed the basic problems of Gandhāran art and the arguments offered, with much greater completeness than space allows me here. J. E. Van Lohuizen-De Leeuw, *The "Scythian Period." An Approach to the History, Art, Epigraphy, and Paleography of North India from the First Century B.C. to the Third Century A.D.* (Leyden 1949) is of the two by far the more thorough in respect to the problems that interest her. H. Deydier, *Contribution à l'étude de l'art du Gandhāra* (Paris 1950) has produced an extremely handy analytical bibliography; covering so much ground, however, that his treatment of some phases is scanty.

⁶ R. E. M. Wheeler, "Romano-Buddhist Art: an Old Problem Restated," *Antiquity* 89 (March 1949) 4 ff. The style, formed under Roman influence in the second century, underwent "a subsequent process of devolution and decay [that] had already reached its ultimate stage by the middle of the 5th century" (12). This striking disagreement with Bachhofer's renaissance hypothesis is probably due to different explanations of the material from Hadda. Wheeler makes the most classical Hadda fragments a direct outgrowth of the Roman second century style. Bachhofer dates the Hadda art as a whole in the fourth and fifth. It should be noted that no basis for dating beyond that made available a century ago has emerged out of the long confusion surrounding the excavation and publication of Hadda by the French mission in Afghanistan.

⁷ H. Buchthal, "The Foundations for a Chronology of Gandhāra Sculpture," *Trans. of the Oriental Ceramic Society* (London 1942-43) 21-30; "The Common Classical Sources of Buddhist and Christian Narrative Art," *JRAS* (London 1943) 137 ff.; and "The Western Aspects of Gandhāra Sculpture," *Proc. of the British Academy* 31

(1945). On p. 4 of the last he says, "The new cycle of religious sculpture which came into being in Gandhāra is based on the main achievement of the art of the Roman empire, the narrative historical relief."

⁸ "Foundation," 30. In "Western Aspects," 10, this becomes: "The first Buddha sculpture repeats the type of an early Imperial toga statue—perhaps it is even a conscious imitation of a statue of Augustus himself." Note that Foucher in *Gandhāra* II, 533 ff. had argued against the "Romano-Buddhist" thesis as it was first propounded in 1889 by V. Smith. If any new artists came from the Roman world they were probably few, and did not deeply affect the established tradition. More generally he had asserted that "there never was a specifically Roman art" (i.e. even in the Roman empire; 536). This refutation seemed so complete to Sir John Marshall that he used it to chide Buchthal for reopening the case (in *JRAS* [1946] 116).

⁹ Especially in his "A Revised Chronology of Gandhāran Sculpture," *ArtB* 18 (Sept. 1936) 387 ff.; and "The Hellenistic Tradition in Northwestern India," *ibid.* 31 (March 1949) 1 ff.

¹⁰ "Revised Chronology," 391, based on an opinion then held by Konow. Note that the latter's explanations of the chronology of this period have fluctuated so widely that any follower must have lost heart sooner or later. His *Kharosthi Inscriptions* (Calcutta 1929), had suggested an initial date around 84 B.C. At the end of his life, by a sort of final recantation, he rejected all these earlier hypotheses and turned back to a Parthian era of 245 B.C. (in "Notes on the Era in the Indian Inscriptions," *India Antiqua* [Leyden 1947] 192-197). Van Lohuizen-De Leeuw has attempted in *The "Scythian" Period* a re-examination of the whole chronological problem, with a new solution of her own. Unfortunately her construction is balanced on a fulcrum that seems to me as unstable as any of the others: the assumption that all dated monuments (except those of Kaniška's dynasty) follow a single system, a "Saka era" commemorating the conquest of Bactria by the Yüeh-chih in 129 B.C. See my review of her book below, pp. 443-446.

¹¹ See P. Gardner, *Catalogue of Indian Coins in the British Museum: Greek and Scythic Kings of Bactria and India* (London 1886) pls. 5-24.

¹² "Greeks and Sakas in India," *JRAS* 1947, 6 ff. Of these Wheeler remarks (*op. cit.* 9-10): "It was surely not from these uncouth monstrosities that the semi-classical forms of the evolved Gandhāra school emerged."

¹³ "Revised Chronology," 391 ff.

¹⁴ "Hellenistic Tradition," 3.

¹⁵ *Ibid.* 7. He does not explain what these "known relations" were. Presumably he refers to the theory that a coin of the first Kushan emperor, Kujula Kadphises, imitates the profile of Augustus; see E. H. Warmington, *The Commerce between the Roman Empire and India* (Cambridge 1928) 296. The resemblance had been cited by Gardner, *Catalogue* p. xlix, pl. xxv, 1, to justify placing Kadphises' rule "in the very beginning of the Christian era."

¹⁶ "Hellenistic Tradition," 8.

¹⁷ *Ibid.* 4; Wheeler, *op. cit.* 7. It should be noted that

this head is connected only by what Rowland considers a stylistic similarity with the others found in the ruins of the apsidal temple at the Sirkap site. For the latter only, provenance suggests a date no later than the end of the first century A.D. (his p. 3, from Marshall).

¹⁸ "Western Aspects," p. 23 and figs. 55, 56. "In one particular instance, the decorative system of a Christian sarcophagus can be proved to have been copied in Gandhāra. Sarcophagi with rows of apostles, or a sequence of christological scenes, separated from each other by trees, are a common feature in Early Christian art, but no pagan sarcophagi of this type are known to exist. Those late Gandhāran friezes showing the Buddha surrounded by monks, or a row of Buddha figures, framed by similar trees, derive without doubt from Christian models." One might ask what likelihood there is that a motif of Christian art confined to Italy and Provence for a few decades of the fourth century could have found its way to Northwest India—at a time when the remnant of Kushan rule in Gandhāra was isolated both by land and by sea from the West (Warmington, *Commerce* 136, has noted that the Roman coins that serve as signs of contact between the Mediterranean and the Indian ports begin to diminish in quantity with Marcus Aurelius, and die almost entirely between Caracalla and Constantius II). More important is the fact that the tree is a basic part of Indian religious imagery. In Buddhist story the Bodhi tree stands for Enlightenment; the twin Sāla trees mean the Entry into Nirvāṇa. The Garden of Jetavana, where the first monastery was erected (and where the Buddha is probably shown preaching in Buchthal's fig. 55) was a site selected for the beauty of its trees and water. A more plausible explanation of the similarity is that both tree compositions grew out of an earlier motif that was of Western origin: the running arcade, as a setting for figures.

¹⁹ Foucher, *Les bas-reliefs gréco-bouddhiques du Gandhāra* (Paris 1905) (hereafter referred to as *Gandhāra I*) 459–464, and fig. 231. Also J. Burgess, *Ancient Monuments, Temples, and Sculptures of India* (London 1897) I, pl. 101. The relief is no. G.67 in the Calcutta Museum, and is 0.145 m. high.

²⁰ E.g. Burgess, *op. cit.* pl. 88; *Archaeological Survey of India, Annual Report 1903–04*, pl. 68. An elaborate square wickerwork seat is illustrated by J. P. Vogel, *La sculpture de Mathurā* (Paris 1930) pl. 34, b.

²¹ E.g. for Hadda, *Rev. des Arts Asiatiques* 5 (1928) pls. 21, 26; for Bāmiyān, B. Rowland, *The Wall-paintings of India, Central Asia, and Ceylon* (Boston 1938) pls. 2, 3; for the developed type imitated in China, A. Priest, *Chinese Sculpture in the Metropolitan Museum of Art* (New York 1944) pl. 28.

²² Foucher, *Gandhāra I*, pp. 524–25, fig. 257. Calcutta Mus., no. G.34; height 0.12 m. Burgess, *Monuments* pls. 79, 149.

²³ The fact that the columnar formula was so ubiquitous in Afghanistan I take to be a sign of marked cleavage in cultural orientation between the two regions. For that reason I feel justified in omitting consideration of the best known and most controversial representative of the formula in Buddhist art, the Bīmarān reliquary, found in Afghanistan.

²⁴ E.g. examples drawn by S. Reinach, *Repertoire des reliefs grecs et romains* (Paris 1912) II, pp. 218, 304. C. Robert, *Die Antiken Sarkophag-reliefs* (Berlin 1890) III, 1, pl. 6, nos. 22–23.

²⁵ Taken from *La Glyptothèque Ny-carlsberg* (Munich 1912) text pp. 216–17, fig. 129. Also published in the museum's *Billedatlas* (Copenhagen 1907) pl. 66, no. 776; and in its *Catalog* by F. Poulsen (Copenhagen 1940) 525. One of a series of fragments found in Rome. Although details place it in what is sometimes defined as a "Greek" group, the figure composition accords with the general Roman taste of the time for three-dimensional verisimilitude.

²⁶ Reinach *Reliefs* II, p. 289; III, p. 14; Robert, *op. cit.* II, pl. 54, no. 154; III, 2, pl. 91, no. 277.

²⁷ E.g. G. Rodenwaldt, "Über die Stilwandel in der Antoninischen Kunst," *Abh. der Preuss. Akad. der Wiss.* 1935, Phil.-hist., III, pls. 1, 2 (sarcophagi); H. Mattingly, *Coins of the Roman Empire in the British Mus.* III (London 1936) pl. 96, 1 (Hadrian and Achaëa).

²⁸ E.g. P. G. Hamberg, *Studies in Roman Imperial Art* (Upsala 1945) pl. 40 (lid to battle sarcophagus from Via Tiburtina, ascribed on p. 176 to the reign of Marcus); K. Lehmann-Hartleben and E. C. Olsen, *Dionysiac Sarcophagi in Baltimore* (Baltimore 1942) fig. 7 (lid with scenes from the childhood of Dionysus).

²⁹ General discussion in E. Warmington, *Commerce*.

³⁰ *Scriptores Historiae Augustae* Hadrian, 21.14. Traditionally ascribed to Aelius Spartianus under Diocletian; it is now believed that the whole collection was written in the 360's under Julian.

³¹ Cited in the "Epitome of the Caesars," *Sexti Aurelii Victoris Liber de Caesaribus* 15: "Quin etiam Indi Bactri Hyrcani legatos misere iustitia tanti imperatoris comperta."

³² See M. R. James' edition of the *Apocryphal New Testament* (Oxford 1924) 365 ff. The evidence for the reign of "Gundaphorus" is discussed by Konow in his historical introduction to *Kharoṣṭhi Inscriptions* pp. xliii, xlvi.

³³ Warmington, *op. cit.* 61; P. Meile, "Les Yavanas dans l'Inde tamoule," *Mélanges Asiatiques* 1940–41 (the wartime continuation of *Journal Asiatique*) 113–17; recent archaeological discoveries are summed up by L. Petech, "Tolomeo ed i risultati di alcuni scavi," etc. *Rivista di Filologia* N.S. 28 (1950) 50 ff.

³⁴ Strabo, *Geography* 2.3.4 (trans. by H. L. Jones, London and New York 1917): "He put music-girls on board, and physicians, and other artisans."

³⁵ E.g. Reinach, *Reliefs* II, p. 451; III, p. 253.

³⁶ Of the two now generally accepted alternative dates for the accession of Kaniska, A.D. 78 and 128, the latter seems to me preferable because it can be fitted best into the Chinese historical evidence. The case for A.D. 128 is summarized by Marshall, "Greeks and Sakas," 29–32. His points should be supplemented by the argument to which I refer below in my review of Van Lohuizen-De Leeuw, p. 444: the fact that the envoy who in 230 reached the Chinese court of Wei from a King "Po-tiao of the Great Yüeh-chih" (i.e. Vasu of the Kushan empire) must have come while that empire still spread over much of Central Asia. It is logical to assume that the purpose

of the embassy was to seek Chinese aid against a new danger, the victorious advance of Sasanian Persia. The Wei prince was of course too distracted by his own civil war to pay any attention. It is not clear how far the destruction of the Kushan state was carried in Ardashir's reign. His successor, Shahpur I (240-270), the great harrier of the Roman East, celebrated an Indian triumph also. The inscriptions that record his victories claim control over the old Kushan provinces as far southeast as the Indus and Peshawar. See M. Sprengling, "From Kartir to Shahpuhr I," *AJSemL* 57 (1940) 330 ff.; also his "Shahpuhr I, the Great, on the Kaabah of Zoroaster," 341 ff. R. Ghirshman in "Fouilles de Begram," *Jour. Asiatique* (1943-1945) 63 ff., has made an ambitious but not entirely convincing attempt to advance the accession date of Kaniska to A.D. 144; on the grounds that the dynasty was extinguished in the 240's, and that its last dated inscription comes from a 98th year.

¹⁷ On the date of Jihonika (regarding which Konow vacillated as widely as a century) see Van Lohuizen-De Leeuw, *The "Scythian" Period* 377-379. She believes that the epigraphy of his coinage justifies placing Jihonika between Wima and Kaniska, and suggests that he was probably the former's nephew (and so the last of the Kadphises dynasty, overthrown by Kaniska).

¹⁸ Vasiška took over from his father Kaniska between the 23rd and 24th summers (150-151?); his last known year is a 28th. See Daya Ram Sahni, "Three Mathurā Inscriptions and their Bearing on the Kushan Dynasty," *JRAS* (1924) 399 ff.; also Van Lohuizen-De Leeuw, *op. cit.* 200, 201, 203, 306, 319, 387, 388. Huviška's dates range from the 33rd to the 60th years. Still uncertain, therefore, is his relationship to a "Kaniska, the son of Vajheška," named as a ruler from the 40th to the 45th. (The latter was presumably a Kaniska II, his father—Vasiška?—being named to distinguish him from Kaniska I). Vasudeva's inscriptions cover the period between the 62nd and the 98th years (so Van Lohuizen-De Leeuw, 201, 203, 319; on pp. 387, 388 she makes his initial year the 74th). The chronology I prefer thus assigns Huviška to the period 160-187 (at least), and Vasudeva to 189-225. The known inscriptions, of course, do not necessarily cover the chronological limits of a reign (an argument against Ghirshman's thesis, referred to in note 36 *supra*).

¹⁹ Gandhāran use of this motif is discussed in detail by Buchthal, "Foundations." As he points out on p. 23, the fact that the Gandhāran garland usually has something like a bunch of grapes hanging at the bottom of the loop suggests a contact with the Near East, where such an elaboration was very frequent. The idea may well have entered Kushan art by two routes: overland from Syria and Asia Minor, and by sea from Alexandria and Rome. See n. 41.

²⁰ Foucher, *Gandhāra* I, 259. Lahore Museum, nos. 2058, 2059; height, 0.49 m. The seven were the Buddhas of this cycle of the universe, who had appeared in a chronological series terminating in Śākyamuni; Maitreya was to be the eighth.

²¹ In the Roman imperial age the Western Cupids seem to have retained a greater degree of Hellenistic liveliness, while those in the East stiffened into repetitious poses or frontality, and were even immobilized on minia-

ture pedestals. An early Western example with an active rear pose is the decorative frieze running at the top of the combat scenes on the Tomb of the Julii, St. Remy, Provence (*CAH* plate vol. IV, p. 60). For a markedly similar Hadrianic example, see J. Toynbee, "A Roman Sarcophagus with its Fellows," *JRS* 17 (1927) 14 ff.

²² M. Lawrence, "Columnar Sarcophagi of the Latin West," *ArtB* 14 (March 1932) 178 ("Pagan 8") and fig. 65. Ascribed to the late Antonine age.

²³ Or was it perhaps also justified by a Roman formula like that used in the narrow intercolumniation of the Vatican sarcophagus (pl. 28 B), where a small Victory at bust length with a wreath is seen above the Eros?

²⁴ From Foucher, *Gandhāra* II, 157, fig. 385. Cf. F. Cumont, *Recherches sur le symbolisme funéraire des Romains* (Paris 1942) fig. opp. p. 464.

²⁵ *Ibid.* 253 ff.; especially fig. opp. p. 314.

²⁶ E.g. Rodenwaldt, "Stilwandel," pl. 8 (Antonine battle relief); Hamberg, *Studies* pl. 39 (same). The "sorrowing Attis" type (Reinach, *Reliefs* II, 54, 66) differs in having crossed legs. It is this latter variant, incidentally, that may well be the prototype (in its seated alternative) of the Gandhāran pensive Bodhisattva, who becomes so popular in the Far East.

²⁷ Buchthal, "Classical Sources," 137 ff., argues that the Gandhāran "Flight of the Buddha from Kapilavastu" was taken from a favorite detail of Roman imperial iconography in the second and third centuries, the *profectio* showing the departure of the emperor on horseback from a city. The cogency of his parallel is weakened by the fact that the same type of horseman, rendered in profile with raised hand, had entered the coinage of the Gandhāran region with the later Greek princes, and was widely imitated under their Scytho-Parthian successors (see Gardner, *Catalogue* pls. 14-24). His further argument, that a figure prostrating himself before the Buddha is to be derived from Roman representations of the *adoratio*—although the act itself had originally been Oriental—seems to me quite implausible. The Buddhist texts speak of an act of prostration; the Gandhāran sculptors, with the wealth of Indian experience back of them, were surely not incapable of illustrating so simple a pose for themselves. Buchthal's demonstration would be convincing only if it were possible to prove that the act of prostration itself was borrowed by the Kushan regime from Persia or Rome.

²⁸ Subject and best-known examples are discussed by Foucher, *Gandhāra* I, 492-97; and by A. K. Coomaraswamy, "Early Indian Iconography, I: Indra, with Special Reference to Indra's Visit," *Eastern Art* I, 1 (1928) 33 ff. Illustration sources are: for the stele from Jauliān, *Arch. Survey of India, Memoirs* VIII, 1921; J. Marshall, "The Stūpas and Monasteries of Jauliān," pl. 8. For the stele from Mamāne-dheri dated the "89th year," *ibid.*, *Ann. Rep.* 1928-29, p. 142, pl. 58, A. For the fragment from Sāhri-bahlol, *ibid.* 1909-10, pl. 19, B; and for another fragment, J. P. Vogel, "Note sur une statue du Gandhāra," *Bull. de l'école française d'extrême Orient* 3 (1903) 159-60, fig. 15. For the stele from Loriyan-tāngai, Foucher, *Gandhāra* I p. 492, fig. 246.

²⁹ From Takht-i-bāhai; Foucher, *Gandhāra* II, 247. For the incident, see the Pāli *Sutta Nipāta*, V, "Pārāyana-

vagga," as translated by V. Fausboll in *Sacred Books of the East*, X, 2 (London 1924) 176 ff.

⁵⁰ Soper, "Aspects of Light Symbolism in Gandhāran Sculpture," *ArtAsiae* 12 (1949) 3, 4; 13 (1950) 1.

⁵¹ This similarity of form has been pointed out by Buchthal, "Western Aspects," 17-20. For the Mithraic cult and its art see Cumont, *Textes et monuments figurés relatifs aux mystères de Mithra* (Brussels 1899); and F. Saxl, *Mithras* (Berlin 1931).

⁵² Buchthal, *op. cit.* 16, calls the Jauliān "Visit" stele "at least 200 years younger" than the one from Mamānēdherī. His criterion is drawn from a conception of Gandhāran evolution that exactly reverses my own: i.e. he sees a development from "academic rigidity (and) clear separation of the divine and human spheres" to a "more vigorous and more humanized" narrative style. Prevailing in the early fifth century, this ideal was finally superseded by an "anti-narrative style" interested primarily in symbolism. Gandhāran art took this complicated course because it reflected faithfully a corresponding development in the Mediterranean world. My earlier criticism of Buchthal's method applies here as well.

⁵³ E.g. Toynbee, *Hadrianic School* pls. xxxix, 2, XLV, 2, XLVIII, 2, XLIX, 2, compared with Foucher, *Gandhāra I*, fig. p. 558.

⁵⁴ E.g. Burgess, *Ancient Monuments* pls. 102, 138, 146; cf. figure at far left of Roman sarcophagus, Cumont, *Cat. des Sculptures* etc. (Brussels 1913) fig. p. 111.

⁵⁵ Foucher, *Gandhāra II* 48 ff. E. C. Spooner, "The Fravashi of Gautama," *JRAS* 1916, pp. 497-504, claims an Iranian origin for the guardian spirit concept.

⁵⁶ Foucher, *Gandhāra I*, p. 462, fig. 232. Calcutta Mus., no. G 50; height 0.20 m. Fragments in a similar style are illustrated by Burgess, *op. cit.* pls. 79, 80, 99, 101, 102, 126, 136, 146-48.

⁵⁷ *Arch. Survey of India, Ann. Rep.* 1921-22, pl. 24, b. Cf. the fragments shown by Foucher, *Gandhāra I*, 446, 449.

⁵⁸ *Arch. Survey of India, Ann. Rep.* 1909-10, pl. 18, b. Roman precedent of course furnishes no example of a terminal pilaster like the Gandhāran, wide enough to hold an applied figure. The possible source of such a pilaster type is suggested by the use of a similarly proportioned member in the monumental architecture of Palmyra; T. Wiegand, *Palmyra* (Berlin 1932) 95, pls. 72, 78. If Roman cartoons contributed anything to the final product, the idea for a small applied figure may have been taken from a grave-altar face (e.g. W. Altmann, *Die Römischen Grabaltäre der Kaiserzeit* [Berlin 1905] figs. pp. 177, 179), or from a candelabrum base (e.g. W. Amelung, *Die Skulpturen des Vatikanischen Museums* [Berlin 1908] II, pls. 60, 61). Burgess, *op. cit.* pl. 149, shows a small, free-standing pier, designed like a pilaster, with a Cupid on each of the visible faces, as on a Roman grave-altar.

⁵⁹ *Ibid.* pls. 76-78, 109, 111.

⁶⁰ Foucher, *Gandhāra I*, figs. on pp. 237, 257, 377, 487, 551, 565, 577; II, 261. Burgess, *op. cit.* pls. 121, 122. For Swat see *ILN* Dec. 24, 1938, figs. 14, 15.

⁶¹ Rowland, "Revised Chronology," p. 395, relates the figure style "to the heavily swathed figures of the

Hadrianic reliefs of the Palazzo dei Conservatori." A more detailed analysis is given in his "Gandhāra and Late Antique Art: the Buddha Image," *AJA* 46 (1942) 224 ff. Bachhofer, *Early Indian Sculpture* 82-83.

⁶² E.g. on some of the figures in the Hadrianic roundels re-used for the Arch of Constantine; see E. Strong, *La Scultura Romana* (Florence 1926) II, figs. on pp. 221-23; especially the right-hand attendant in fig. 134.

⁶³ Discussed by Rowland, "Notes on the Dated Statues of the Northern Wei Dynasty," *ArtB* 19 (March 1937) 93 ff.; A. Salmay, "The Udayana Buddha," *Eastern Art* 1, 4 (1929) 225 ff.; J. Hackin, "The Colossal Buddhas at Bāmīyān: their Influence on Buddhist Sculpture," *ibid.* 1, 1, pp. 109 ff. In citing these references, I wish to register disagreement with Hackin's assertion (109) that the Bāmīyān colossi are "decidedly earlier" than Mathurā figures of related type, and inspired them; also with Rowland's claim in *Gandhāra and Late Antique Art* 230, that they served as prototypes for the colossi at Yün-kang.

⁶⁴ One of the group is dated in a 22nd year; Van Lohuizen-De Leeuw's sensible new chronological hypothesis makes this an abbreviation for a 122nd year, based on Kanishka's system but post-dating the fall of his dynasty (and so by my reckoning, A.D. 249). She cites as undated predecessors the better-known Buddha stelae from Sahēth-Mahēth and Sitalā Ghātī, which she thinks are stylistically a generation or so earlier; and (with a small Buddha instead of a Bodhisattva in the socle frieze) that from Anyor, dated in a 51st year which she ascribes to the Kanishkan era proper (hence A.D. 178 by my reckoning). See her 188 ff., 202 ff., 232 ff.

⁶⁵ In attempting to explain this feature as it appears on the stūpa pilasters at Hadda, J. Barthoux has suggested a plausible derivation from the design of the traditional Indian railing post; *Les fouilles de Hadda I* (Paris 1933) 19-20.

⁶⁶ The chronological confusion exemplified in its most extreme form by the vacillations of Konow shows that a relatively minor piece of evidence can force a complete reconsideration. Since the discovery of new inscriptions or the reinterpretation of old ones may at any time again violently disturb the balance, it seems to me sensible to emphasize as a stabilizing factor, a chronological attribution by sculptural style. I cannot place the Loryān-tāngai Buddha as early as A.D. 168, where Konow's (and Rowland's) "old Saka era" of 150 B.C. would put it. His earlier theory based on 84 B.C. produced the more acceptable dates A.D. 234 and 300.

⁶⁷ Bachhofer, *Early Indian Sculpture* 80, 81.

⁶⁸ The Loryān-tāngai Buddha still follows the arm fold formula of the Berlin figure, though the Mamānēdherī Buddha in the cave has abandoned it for uniformity. Unfortunately the left arm of the Chārsada image has been knocked off.

⁶⁹ Bachhofer, *op. cit.* II, pls. 77, 78. Dated in the 6th year of the Kushan era, i.e. A.D. 133. I suspect that this throne type was brought into India with the Iranian cultural baggage of the Kushans or their Scytho-Parthian predecessors, although I have as yet insufficient evidence to push the claim.

⁷⁰ Bachhofer, *op. cit.* II, pl. 84.

⁷¹ From H. Ingholt, "Inscriptions and Sculptures from Palmyra," *Berytus* 3 (1936) 95-97, pl. xx, 3. Ascribed to the style of A.D. 50-150. Note the striking comparisons between the earlier architectural ornament of Palmyra and that of Mathurā drawn by H. Seyrig, "Ornamenta Palmyrena Antiquiora," *Syria* 21 (1940) 276 ff.

⁷² First reported by Marshall in *Arch. Survey of India, Ann. Rep.* 1912-13, pp. 15 ff., as one of numerous sculptural fragments found in the remains of a chapel built of "large diaper" masonry (the type assigned by him to the second century). Returning to the theme in "Greeks and Sakas," 15-16, he dated the chapel in the latter part of the first century, as being of the same type as Chapel A, 1, at the Kālāwān site, where an inscription dated by him in A.D. 76 had been found. The sculptural contents he now believes were assembled over a long period, and in some cases may be older than the building. This reappraisal was made in answer to Bachhofer's treatment of the relief in "On Greeks and Sakas in India," 227, as dating in the last quarter of the first century A.D. I agree with Rowland that Marshall's new caution has not diminished the probability of an early date ("Hellenistic Tradition," p. 7, n. 46). I do not believe, however, that the principal Kālāwān pieces, the "Dream of Maya" and the Brahman in his hut, belong to the pre-Romanizing period (*Arch. Survey of India, Ann. Rep.* [1930-34] pp. 158 ff., pl. 94).

⁷³ Gardner, *Catalogue* p. 47, pl. xxxiv, 7.

⁷⁴ From Ingholt, *Berytus* v (1938) p. 123, pl. xlvii. Ascribed to the early second century A.D.

⁷⁵ Vogel, *Mathurā* pls. 36, 27, 51; Bachhofer, *Early Indian Sculpture* pls. 84, 87 (both duplicating Vogel), 86; *Arch. Survey of India, Ann. Rep.* (1919-20) pl. 17, a (the stele of the 22nd year, my A.D. 249); (1922-23) pl. 39, e; (1930-34) II, pl. 122, a (the stele of the 51st year, my A.D. 178). Van Lohuizen-De Leeuw, *op. cit.* figs. 33, 37, 39, 40, 43, 44, 50, 54.

⁷⁶ See for example Bartheoux, *Hadda* I, figs. pp. 86, 105, 108, etc.; Foucher, *Gandhāra* II, fig. p. 351 (from Kabul); J. Meunié, *Shotorak* (Paris 1942) pls. 6, 10, 11, 18, 19.

⁷⁷ E.g. the late stūpas at Mohrā Morādu, *Arch. Survey of India, Ann. Rep.* (1915-16) II, pls. 19, 20, 24; (1927-28) pl. 39; at Jauliān, *ibid.* (1917-18) I, pl. 5; at Pippala, *ibid.* (1923-34) pl. xxiii, 3; at Kālāwān, Court B, *ibid.* (1930-34) II, pl. 95.

⁷⁸ See n. 64.

⁷⁹ See n. 77.

⁸⁰ Foucher, *Gandhāra* I, figs. pp. 417, 421, 485, 491, 509, 513, 533. Van Lohuizen-De Leeuw, *op. cit.* 109, assigns the Sikrī reliefs "to the very beginning of the development of North-West Indian art." I believe, conversely, that their relatively late date is shown by such features as the larger halo, the marked disproportion in size between the Buddha and the other figures, and the intrusion of symbolic decoration on the face of his seat.

⁸¹ Foucher, *op. cit.* fig. p. 487.

⁸² *Ibid.* figs. pp. 423, 433.

⁸³ Gardner, *Catalogue* pl. 25.

⁸⁴ *Ibid.* pls. xxvii, 15; xxix, 10.

⁸⁵ *Ibid.* p. lxii, pl. xxviii, 20.

⁸⁶ *Ibid.* pl. xxviii, 21.

⁸⁷ *Ibid.* pl. xviii, 24.

⁸⁸ H. Mattingly, *Coins of the Roman Empire* III, pls. 48, 19-20; 49, 1.

⁸⁹ Gardner, *op. cit.* pl. xxviii, 17, 18. No. 22 shows the two gods Skandha and Viśākha facing each other in three-quarters poses and extending their hands. Though they are not actually shaking hands, they closely approximate the Roman coin formula that shows a pair of personifications doing so; e.g. Toynbee, *Hadrianic School*, p. 108, pl. xv, 25 (Roma and Italia).

⁹⁰ Gardner, *op. cit.* pls. xxvii, 12; xxix, 4, 5, 7 respectively.

⁹¹ *Ibid.* pls. xxvii, 17; xxviii, 16 respectively.

⁹² First reported by Spooner in *Arch. Survey of India, Ann. Rep.* (1908-09) 44.

⁹³ Rowland, "Revised Chronology," 392, figs. 11, 17.

⁹⁴ See Vogel's report on excavations in *JRAS* 1912, p. 115, pl. I. He speaks of "seated Buddha figures (of a late Indian type)."

⁹⁵ One might arrive at something fairly like the Shah-jī-ki-dherī figures by combining the characteristics of a number of small stuccoes found by Stein in the neighborhood of Khotan. A miniature Buddha from Yotkan gives the general type, with shawl collar and exposed feet (*Ancient Khotan* [Oxford 1907] pl. 48, Y.0029). A Bodhisattva from Dandan Uilūq shows the same sort of crudely incised drapery lines (*ibid.* pl. 53). A standing Buddha at Rawak illustrates a rich development of incised swirling folds; a squatting one nearby follows the Guptan pseudo-nude type that at Shah-jī-ki-dherī has combined with the Gandhāran heavy robe tradition (*ibid.* text vol., pl. 61, ii and xi). Generally similar also are the early, westernizing Buddhas at Yün-kang.

⁹⁶ For Hsüan-tsang see S. Beal, *Buddhist Records of the Western World* (London 1906) I, 103. The Korean account, "A Record of a Journey to the Five Realms of India," by the Silla monk Hui-ch'ao, is reprinted in the Japanese Tripitaka, *Daisōkyō* 51, no. 2089, p. 977. He returned in 730.

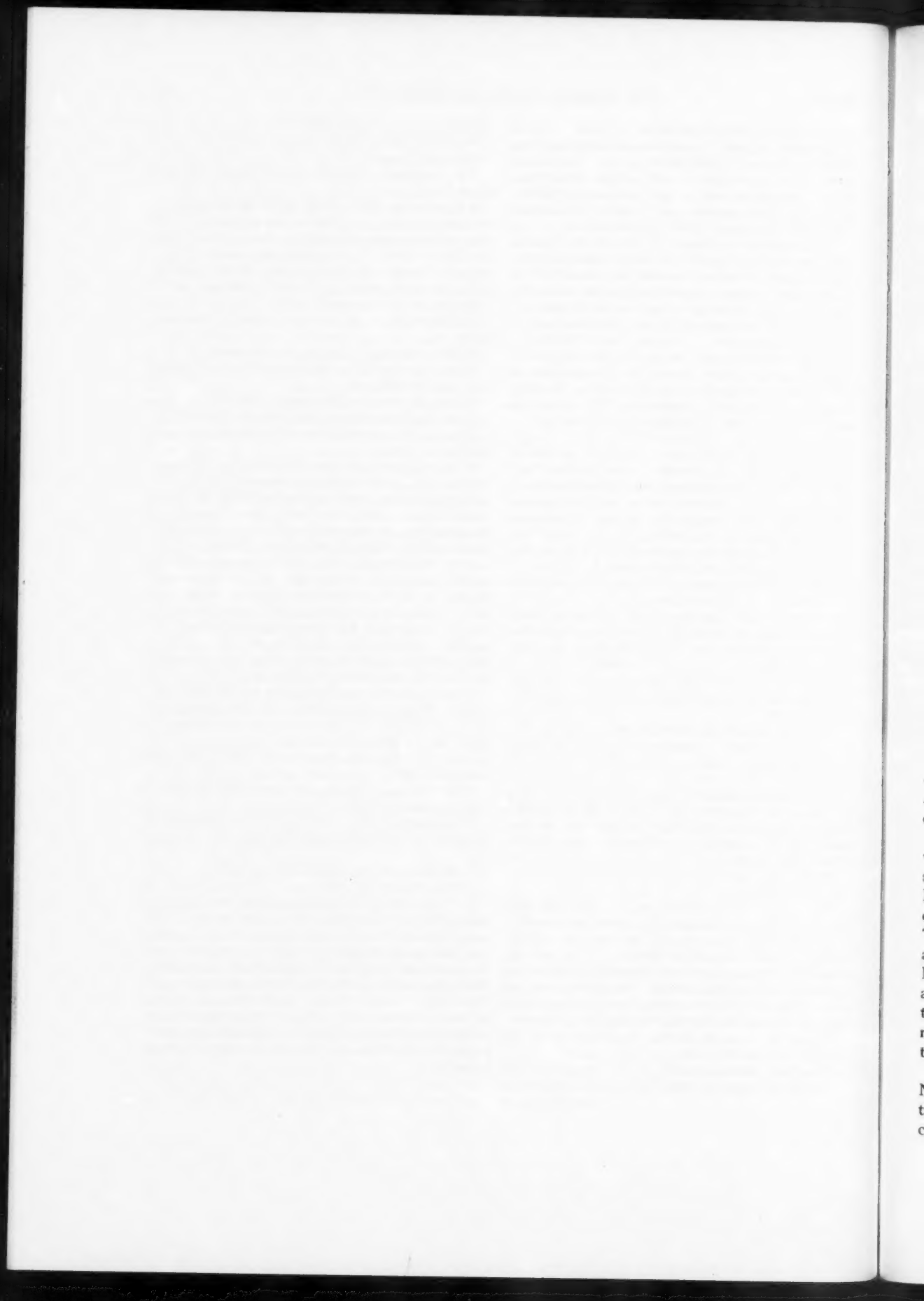
⁹⁷ See Konow, "Suggestions concerning Kaniška," *Acta Orientalia* 6 (1927).

⁹⁸ Rowland, *op. cit.* p. 392, fig. 8. First published by Marshall, *Arch. Survey of India, Ann. Rep.* 1914-15, p. 6, pl. 5.

⁹⁹ Bachhofer, *Early Indian Sculpture* I, 77.

¹⁰⁰ *Ibid.* II, pls. 145-147.

¹⁰¹ *Ibid.* pl. 145. In the Buddha note the very large halo, and the fact that the folds on the left arm all run in the same direction. The pedestal shows two miniature squatting Buddhas separated by a tree; the relation of these to the main image suggests at least a half-way approach to Mahāyāna, and the kind of all-Buddha trinities seen at Yün-kang in the fifth century. The Bodhisattva's pedestal has an incense-burner at the center, a motif whose prevalence at Yün-kang speaks for a late date (and whose adoption in Gandhāra may very well be a sign of Persian influence).



Paintings of the Egyptian Middle Kingdom at Bersheh

WM. STEVENSON SMITH

PLATES 18-21A

THE tomb of Prince Djehuty-hetep at Deir el Bersheh (No. 2) was completely published by Percy E. Newberry in 1895. Some portions of the tomb had been copied earlier and the famous scene of the colossal statue being dragged from the alabaster quarries appeared in various nineteenth century books about Egypt such as Sir Gardner Wilkinson's *Manners and Customs of the Ancient Egyptians* (III 328). The owner of the tomb was governor of the province in Middle Egypt known as the Hare-Nome, a personification of which appears as early as the Fourth Dynasty in the Boston slate triad of King Mycerinus. The town called by the Greeks Hermopolis Magna was the capital of this district in which Akhenaten in the Eighteenth Dynasty founded his new capital at Tell el Amarna on the east bank of the river only a few miles south of Bersheh. Opposite, on the western edge of the desert, the residents of Hermopolis in Graeco-Roman times buried their dead in the remarkable tombs of the necropolis at Touneh el Gebel. Here there was a sanctuary of the god of wisdom, the Ibis-headed Thoth (Djehuty), with its underground galleries filled with the mummified bodies of the animals sacred to the god. Thoth had supplanted in Hermopolis the Hare Goddess Wenut whose emblem remained in the name of the province. The region showed four periods of important artistic activity: at Sheikh Said in the Old Kingdom tombs, in the Middle Kingdom tombs at Bersheh, at Amarna in Dynasty 18, and in the Graeco-Roman necropolis at Touneh beginning at about the time of Alexander with the tomb of Petosiris.

Prince Djehuty-hetep, Governor of the Hare Nome and High Priest of Thoth at Hermopolis, tells us in his tomb inscriptions that he was a child in the reign of Amenemhat II, held im-

portant offices under Sesostri II and continued as a great official into the reign of Sesostri III when he prepared his tomb. This tomb is the last in the series preserved at Bersheh and represents the culminating point in the skill of the craftsmen as well as in the wealth of the local nobility. The Boston coffin of Djehuty-nekht similarly embodies the full realization of the efforts of a long line of Bersheh painters.

A statue of the Nomarch was found at Megiddo in Palestine where he seems to have served as a sort of High Commissioner, like the Vizier Sesostri-ankh at Ugarit, the modern Ras Shamra on the coast of northern Syria. The parallel with the Nomarch of Elephantine, Sa-renput, and the Nomarch of Assiut, Hepzefa, who probably succeeded him as governor of the fortified trading post of Kerma in the Sudan, suggests that, after establishing a considerable political control beyond their southern border, the Middle Kingdom kings turned toward a more thorough domination of Palestine and Syria than was once believed.¹ In his Bersheh tomb, Djehuty-hetep displays a herd of cattle which he may have acquired during his foreign service, since their label says, "Utterance of . . . the cattle of Retenu (Syria-Palestine) during the counting (?). 'Ye (once) trod on sand, ye (now) walk on the herbage.'"²

The chapel of the tomb of Djehuty-hetep consisted of a large rock-cut chamber with a small shrine in its back (north) wall and entered from a portico supported by a pair of palm columns. A subsidence of the rock strata during an earthquake forced forward the upper part of the inner chamber, throwing down large portions of the east wall and virtually destroying the portico. Newberry restored what fragments he could find in his drawing of the east wall but a re-clearance of the site by the Har-

vard-Boston Expedition in 1915 produced over sixty more fragments from this wall which are the subject of the present article. These small pieces long lay unrecognized in the store-rooms at Harvard Camp but were finally copied by the present writer in 1947 and the chief pieces delivered to the Cairo Museum. A few other fragments already published by Newberry had also found their way to the Cairo and British Museums, while a block of inscription from above the representation of the ladies of the Nomarch's family had already reached the Cairo Museum before Newberry carried out his work.³

In 1947 the writer visited Bersheh and was forcibly struck by the great beauty of the workmanship of the tomb. The precision and delicacy of the drawing and the clarity of the pure, bright tones confirmed the impression already gained from a study of our expedition fragments. It was clear that there was a refinement and subtlety in the painting here that was perhaps only equalled in the Middle Kingdom by the Bersheh coffin of the Nomarch Djehuty-nekht in the Boston Museum and the tomb of Ukh-hetep III (C 1) at Meir. It was also clear that a great deal more of the work was executed in paint alone than might have been expected from previous publications. Only the lowest register of the inner room and some of the large figures are carved in flat, rather sharp-edged relief like that on the back walls of the portico. The refinement in the paintings does not take the form of such innovations as the impressionistic pigeon and the burning incense on the coffin of Djehuty-nekht or the stippled green bands on the cloak of Ukh-hetep III at Meir. It lies in the delicacy with which the unusual variety of clear, bright tones are applied and in the multiplicity of very fine detail. Something of this quality is suggested by the paintings of Uah-ka II's tomb at Qau el Kebir (which I know only from the line drawings in Petrie's *Antaeopolis*, pls. 23-28), while the painted reliefs from that site in Turin and Leipzig approach it very closely. There is none of that bald, clumsy provincial style which still lingers on in the Twelfth Dynasty tombs at Beni Hasan and Thebes and is still apparent at Bersheh itself in the tomb of Djehuty-nekht

(No. 1, belonging to a different man from that named on the Boston coffin).

It is significant that the three tombs having the closest affinities in style, those of Uah-ka II, Ukh-hetep III and Djehuty-hetep, are the latest tombs to be decorated at their respective sites of Qau, Meir and Bersheh. The first is of the reign of Amenemhat III while the other two are of the reign of Sesostri III. All the other tombs which are important for purposes of comparison are earlier than these. Intefiker of Thebes was a vizier of Sesostri I, and Sa-renput I of Assuan and Hepzefa of Assiut both decorated their tombs in that king's reign. The two tombs at Meir which show the strongest Old Kingdom influence (Senbi [B 1] and Ukh-hetep I [B 2]), lay in the north of the country and were decorated in the reigns of Amenemhat I and Sesostri I when we know that the court in the north was turning back to the Old Kingdom for inspiration in the decoration of the Lisht pyramid temples. The development at Beni Hasan breaks off, probably in the reign of Sesostri II, with the tomb of Khnum-hetep (No. 3) which still retains traces of the provincial clumsiness shown by the Eleventh Dynasty paintings there, although in less pronounced fashion than in the adjoining tomb of Amenemhat which is of the reign of Sesostri I. The paintings of Khnum-hetep are not unlike those of Sa-renput II at Assuan which are of the reign of Amenemhat II. Both are closer in style to Djehuty-hetep than is the Bersheh tomb of Djehuty-nekht of the reign of Sesostri I which still retains many of the characteristics of the Eleventh Dynasty tombs at that site.

Thus the factor of time in the development of style and technique must be taken into consideration as well as the regional peculiarities of the different Middle Kingdom sites. We are singularly ill-informed as to the reliefs and paintings executed at court after the early part of Dynasty XII, whether in the funerary temples of the kings or in the private tombs which lay around the royal pyramids. Only in the case of the first two kings, Amenemhat I and Sesostri I, can we form a definite impression by studying the splendid series of reliefs in the Metropolitan Museum's collections.

While the newly identified Bersheh fragments

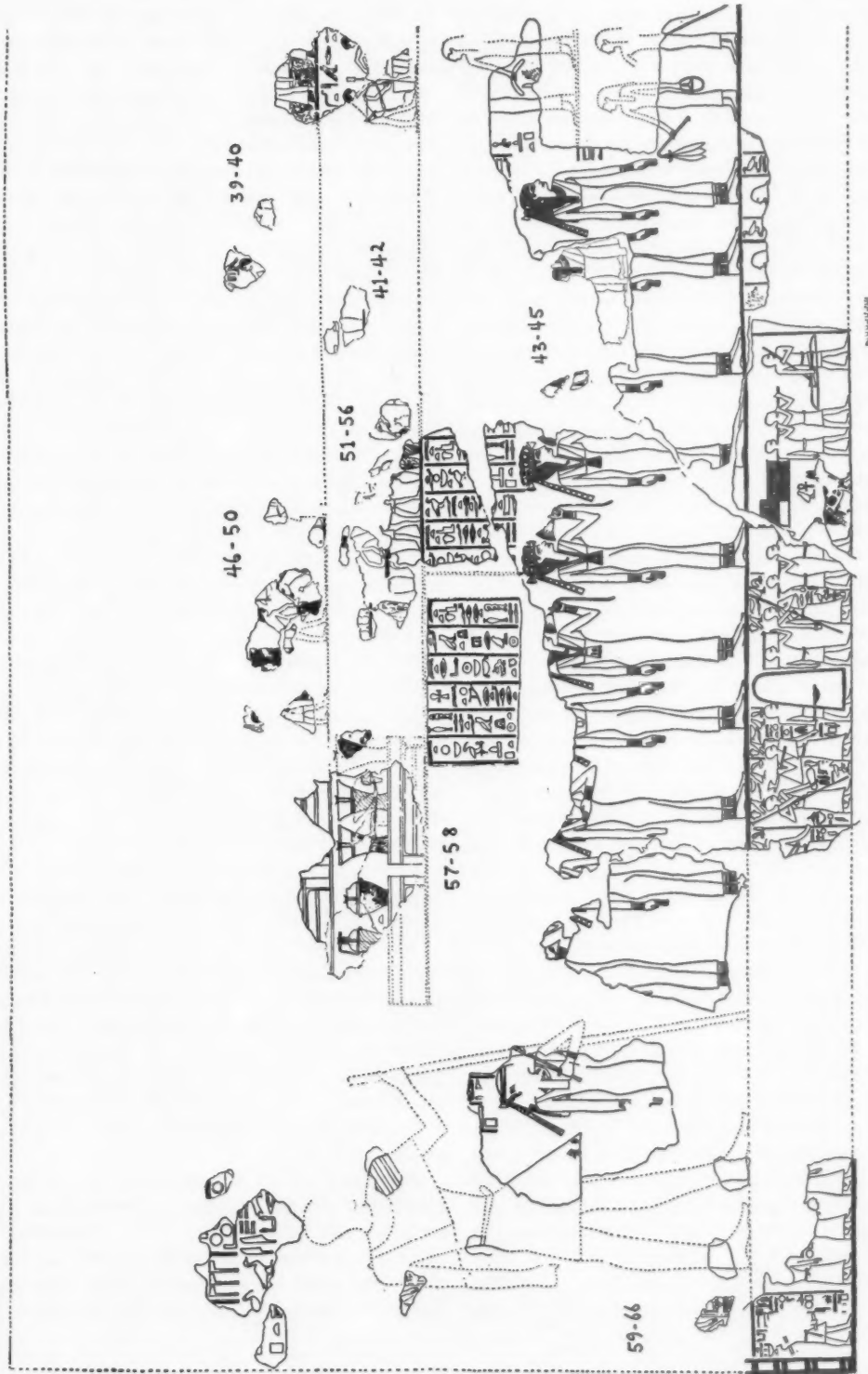


FIG. 1. DJEHUTY-HETEP. LEFT HALF OF EAST WALL.

do not add a great deal that is new to the subject matter of the interesting scenes of life on Djehuty-hetep's estate, they fill out the material represented on the east wall and enable us to arrange the scenes in a more comprehensible fashion than was possible in the reconstruction illustrated on Newberry's plate 24. The composition of the wall is complicated by the long row of ladies of the Nomarch's family which runs halfway across the wall and blocks the three registers to the right of them (figs. 1, 2). A certain amount of space is also taken up by the two rows of attendants which face these ladies. If the upper part of the attendant with the fan is removed to a position in the register below on the right, the group of men trampling grapes falls into better relationship with the rest of the vintage scene, while the ovens above can be brought alongside the cake-making scene and the action in the three upper registers progresses in a more reasonable fashion across the wall. That the fragment with the attendant was not placed correctly by Newberry is suggested by the fact that the hieroglyphs in a supposedly continuous inscription reverse their direction at the point where the fragment was joined to the block below (fig. 3). The new arrangement allows for a stepping down of small sub-registers which will accommodate a line of jars, the little scene of watering the orchard and the fragments of a vine which is not part of the grape arbor. These can be fitted comfortably in between the attendants and the scenes of spinning and weaving (fig. 2).

Beginning in the right of the top register, fragments 1-3 add two men sowing in front of the sheep which are trampling in the seed. Fragment 4 is the shoulder of the overseer in the flax-picking scene below. On the right of the third register, pieces 5 and 6 join with the little scene where men are gathering green plants. Below this, No. 7 adds a large piece of the right end of the attractive garden with its neat rectangular plots of irrigated land in which bright green plants grow against the dark brown earth (fig. 4). Fragment 8 gives part of the border of the spinning scene,⁴ while No. 9 shows the last two figures of the Nomarch's attendants in the lowest register.⁵

The small pieces 10-11 are the legs of the cattle in the first plowing group in the top

register. Several of Newberry's fragments, which clearly fit, have been combined here, including one which seems somehow to have been reversed in his drawing so that the oxen and one man faced in the opposite direction. No. 12, below, is the feet of the donkeys threshing grain which had already been placed in this position in the original reconstruction. Fragments 13-14 are parts of cakes placed on a mat, while the group 15-22 fills out the grape arbor with two men picking grapes and placing them in a basket and a tray, and continues into the next register with parts of two rather doubtfully restored spinning women (22-23). One arm of the woman on the right appears in Sir Gardner Wilkinson's attractive unpublished sketch of this section of the wall. Wilkinson evidently saw the scene before it was defaced by the Coptic crosses which have been daubed across it, but since Newberry has already made use of the Wilkinson MSS which are now on loan at Oxford it does not seem necessary to reproduce the photograph which the Griffith Institute was kind enough to make for me of this drawing.

The first piece of the group of fragments 24-28 (shown again on pl. 19 with a part of the grape arbor) has two jars on stands in a sub-register and, below, a bit of the flowers of a vine which appears again in 25-28, set against a pink background covered with small red dots. The vine bears gourd-like fruit and is accompanied by a green basket such as is used for figs in Old Kingdom scenes. The vine adjoins the foot of a man carrying a pink jar which evidently forms part of the scene of men watering a tree. Somewhat similar gardening scenes, again in connection with the vintage, appear in the tombs of Daga (Davies, *Five Theban Tombs* pl. 31) and Intefiker at Thebes (Davies, *The Tomb of Antefoker* pl. xv), at Assuan in the tomb of Sa-renput I (H. Müller, *Felsengräber* pl. 26) and in the tomb of Khnum-hetep (No. 3) at Beni Hasan (Newberry, *Beni Hasan I*, pl. 29).

Fragments 29-31 are part of a second man plowing in the top register and below is an inscription including the word "throwing" (*ḥꜣꜣ r p . . .*) which suggests that it may accompany the winnowing scene in Fragment 34. Below are two basins of grain (No. 32, already

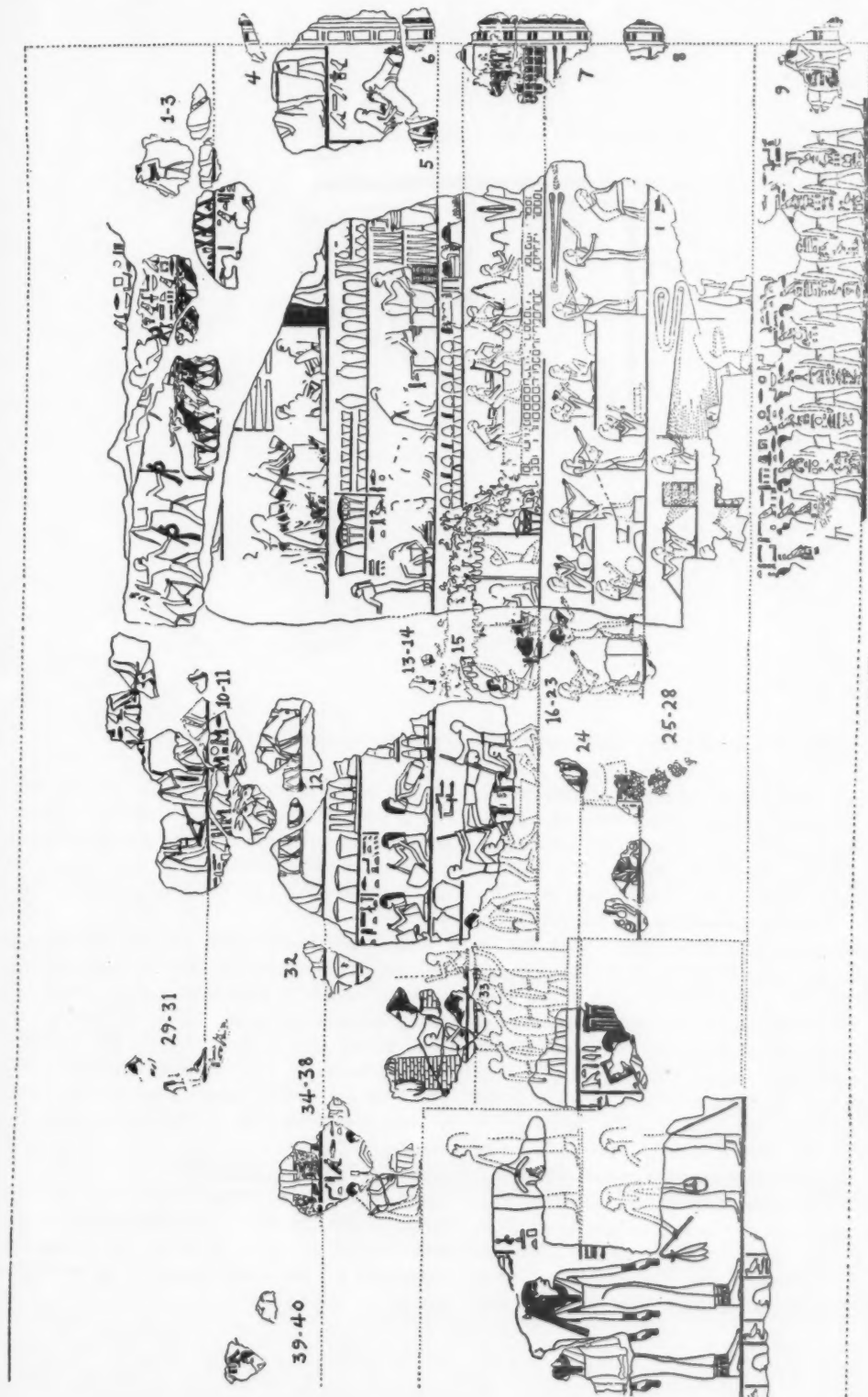


FIG. 2. DJEHUTY-HETER, RIGHT HALF OF EAST WALL.



FIG. 3. FORMER ARRANGEMENT OF FRAGMENTS ON EAST WALL OF DJEHUTY-HETEP TOMB.

copied by Newberry) and farther down on the wall a bit of the pole by which the men trampling grapes steady themselves (No. 33). Fragments 34-38 (the part shown on pl. 18 is reproduced on a small scale by Newberry) form a small section of the second and third registers with two winnowing women above and, below, men pouring something into what looks like a mould (painted dark brown with black outlines). The little vessel held by the man on the left is white with a red outline, while the object held by the man on the right is painted pink. The inscription above on the left seems to read, "putting in the fire," while the label on the right mentions "sifting." The word *wb3*, written between the two men, means "to bore" in connection with the making of stone vessels, but its reference to the action here is far from clear. Perhaps the men are moulding tall cakes as in the tomb of Daga (Davies, *Five Theban Tombs* pl. 38, lower left). The whole of this

register of cooking scenes, extending to the men filling jars on the left in fig. 1, is fairly closely paralleled in the tomb of Sa-renput I at Assuan (Müller, *Felsengräber* pl. 23) and again at Thebes (Davies, *The Tomb of Antefoker* pls. 11, 12).

Fragments 39-40 in the second register may be men driving donkeys. One of these animals is being loaded with sheaves from a pile in the group 46-50 (see also pl. 20) farther to the left. Nos. 41-42 and 51-56 all belong to the scene already mentioned in the third register where two men are pouring and straining liquid into vessels of various shapes. This can refer to the making of either wine or beer but in this case it may represent the preparation of oil since it seems to adjoin the huge ointment jars. Of the latter, fragments 57-58 actually provide somewhat less than was once visible to Newberry, except for the small new fragment of the cylinder jar on the right.



FIG. 4. DJEHUTY-HETEP. DETAIL OF EAST WALL.

The first lady of Djehuty-hetep's family in the row of figures below is now in the British Museum (No. 1150, *Guide Sculpture* [1909] p. 61). Fragments 43-45 provide part of the second and third figures. Parts of the fourth, fifth and sixth girls are in the Cairo Museum (see photograph in Von Bissing, *Denkmäler I*, pl. 35), while the register beneath with the armed attendants, the carrying chair and the pet dog are in the British Museum (No. 1147; see photograph in Sir E. Denison Ross, *The Art of Egypt Through the Ages*, 142). The block with the inscription above the sixth and seventh girls is also in the Cairo Museum where it bears the temporary accession No. 19-4/22-12. Finally, the fragments 59-66 provide small portions of the large figure of Djehuty-hetep, the titles above him and two of his accompanying attendants.

It is the fragments on pls. 19, 20 and those shown in line drawings in figs. 4-6 which give the best idea of the quality of the work in this tomb. They are reproduced from my colored copies since the condition of the original pieces was not very satisfactory for photographing. The vine preserved in small bits (pl. 19) is unusual both for the freedom with which it is drawn and for its rare occurrence. The reddish supports on which the vine was trained show through the foliage here and there. Both the foliage and the gourd-like fruit are quite different from that of the grape arbor, a small fragment of which is included on the right. The little flowers are yellowish-buff outlined with red and the pinkish background, stippled with red, seems to be intended to represent sandy ground. It is only in hunting scenes that there is any sort of parallel for this background. It is separated from the ordinary gray ground color of the wall by a red line, both in the area above the green basket, beneath the black horizontal register which supports the blue jar and the yellow striped white jar set in stands, and again on the left where the man carrying a pink jar stands on a black register line and is further marked off by a vertical black border. Beneath this man there are traces of green background for the area below which thus must again have contained some sort of plants. We are somewhat prepared for this naturalistic representation of plants by details on the Bersheh coffin

of Djehuty-nekht and by the tomb of Khnum-hetep at Beni Hasan with its famous acacia trees, one of which has been so beautifully reproduced by Mrs. Davies on pl. 9 of her *Ancient Egyptian Paintings*. There are also some wonderfully drawn trees and bushes at Qau el Kebir and in the reliefs in the Metropolitan Museum from the pyramid temple of Sesostris I, and the Dynasty XI tombs at Deir el Bahari.

Characteristic of the careful detail of the Bersheh tomb are the tiny red outlines of the grain beside the feet of the winnowing women in pl. 18 and the minute lines which delineate the stalks and heads of grain in the sheaves on pl. 20. Characteristic also are the little projecting blobs around the outline of the men's hair on both plates. The winnowing blades carried by the women and the object held by the man in the register below are a pinkish shade (a light salmon color) which is also applied to the pottery vessels on this wall. Like the rose-pink color of the donkeys this is in keeping with the new palette used by the Middle Kingdom painter which employed a variety of red, brown and yellowish tones. Even toward the end of the Old Kingdom, in the tomb of Pepy-anh-her-ib at Meir, the usual gray of the donkeys takes on a pink caste making it look almost lavender against the blue-gray of the background. In the First Intermediate Period tomb of Ankhtifnekht at Mialla a strident color scheme appears, in which donkeys and cattle are given shades of bright pink, lavender and even purple. It would seem, as I have suggested in discussing the Bersheh coffin in Boston,⁶ that the painters of the First Intermediate Period, by breaking down the conventional Old Kingdom color scheme, made possible the softer nuances and new combinations of color which appear in the Middle Kingdom. The new Middle Kingdom use of red and brown shades is also found at Bersheh on the coffin of Djehuty-nekht where an unusual deep crimson red appears, and upon a second pair of coffins which were so badly eaten by white ants that copies could be secured only of fragmentary portions. These lay in shaft 10 B, adjoining that of Djehuty-nekht, and belonged to a lady named Sat-meket. The owl hieroglyph on the fragment of her coffin on pl. 21, A shows the delicate drawing characteristic of the best

Bersheh work as well as a typical Middle Kingdom combination of soft light brown and yellow tones. At the other end of this range of brown tones is the dark chocolate hue of the mud squares surrounding the irrigation plots in fig. 4 and of the moulds used by the cake makers. In general, the use of lemon yellow, pink, light red and light blue produces something of the effect in the tomb of Djehuty-hetep that we think of as characteristic of the early Eighteenth Dynasty.

The drawing of the donkey (fig. 5) brings out well the extremely fine quality of the work in this Bersheh tomb. It captures the essential form of the animal better than does the vigorous drawing of the laden beast in the tomb of Khnum-hetep at Beni-Hasan (fig. 5, left) which still retains some of the clumsy wooden quality of such an Intermediate Period example as that from the tomb of Itety at Gebelein in Turin (fig. 5, below). On the other hand, the rather boorish peasant face so often met with in the Middle Kingdom appears at Bersheh in the spinning woman of fig. 6. In this fragment another Middle Kingdom characteristic is the mannered drawing of the hands as in a similar figure at Beni Hasan (fig. 6, below left) which goes back to such delightful examples as the two on the right of fig. 6 from the Eleventh Dynasty sarcophagus of the court lady Kawit at Deir el Bahari. Still another feature common to the period is the striped cloak, which the fragment restored on the shoulder of Djehuty-hetep suggests was here banded in an unusual combination of black and red.

While the paintings in the tomb of Djehuty-hetep are thoroughly characteristic of Twelfth Dynasty style in general, their individual quality lies in their neat precision, the clarity of the minutely rendered detail, the elegance of the slender forms and the light clear coloring. As always in the finest Egyptian work we are also conscious of an underlying traditional element, a classical strain, which makes one think, at one extreme, of the consummate craftsmanship of the Medum paintings of the chapel of Neferma'at's wife Atet at Medum and, at the other, of the early Eighteenth Dynasty paintings at Thebes. The instinctively detailed observation of natural forms is a constant element which makes the Egyptian's experiments with brush-

work to imitate the texture of a surface unique in early painting.

The information which can be gained from a study of these fragments from Bersheh suggests how much more could be learned from a careful examination of the paintings in other little-visited Middle Kingdom rock-cut tombs. Colored copies should be secured while the evidence still exists, since it is impossible to gain an adequate impression from small line drawings. A magnificent beginning was made in this direction by Mr. and Mrs. Norman de Garis Davies when they recorded the Eleventh Dynasty tombs of Daga and Djar and the Twelfth Dynasty tomb of Intefiker at Thebes. Mrs. Davies' wonderful reproductions of details from the Beni Hasan tombs again provide the student with the actual texture and coloring of the paintings there. However, there is much more to be done at Beni Hasan. Even at Bersheh, Tomb No. 1 (Djehuty-nekht) and No. 5 (Aha-nekht) are not completely copied and the drawings of the latter are wrongly combined in several cases in the plates of *El Bersheh* Part II. Müller's photographs and drawings are very helpful in conveying for the first time the style of the Assuan tombs, and it is reported that Blackman is completing his fine record of the Middle Kingdom tombs at Meir by a publication of the paintings of the tomb of Ukh-hetep III. But there are still only line drawings of a portion of the paintings at Qau el Kebir. The important ceiling patterns have been published in color and some record has been made of similar ceiling designs in the tomb of Hepzefa at Assiut, but there are still magnificent, if very fragmentary, traces of other paintings in that tomb⁷ and in at least one of the Eleventh Dynasty tombs at Assiut. We are in an even worse position in regard to the material for the First Intermediate Period, as can be seen from the summary of the evidence in Chapter XII of my *History of Egyptian Sculpture and Painting in the Old Kingdom*. The tombs at Akmim, for example, do not seem to have been reproduced in any fashion.

Although there can be no question of the diversity of style which appears in the tomb decorations of the various Middle Kingdom provincial capitals, it is obvious that we need more detailed records to be able to understand

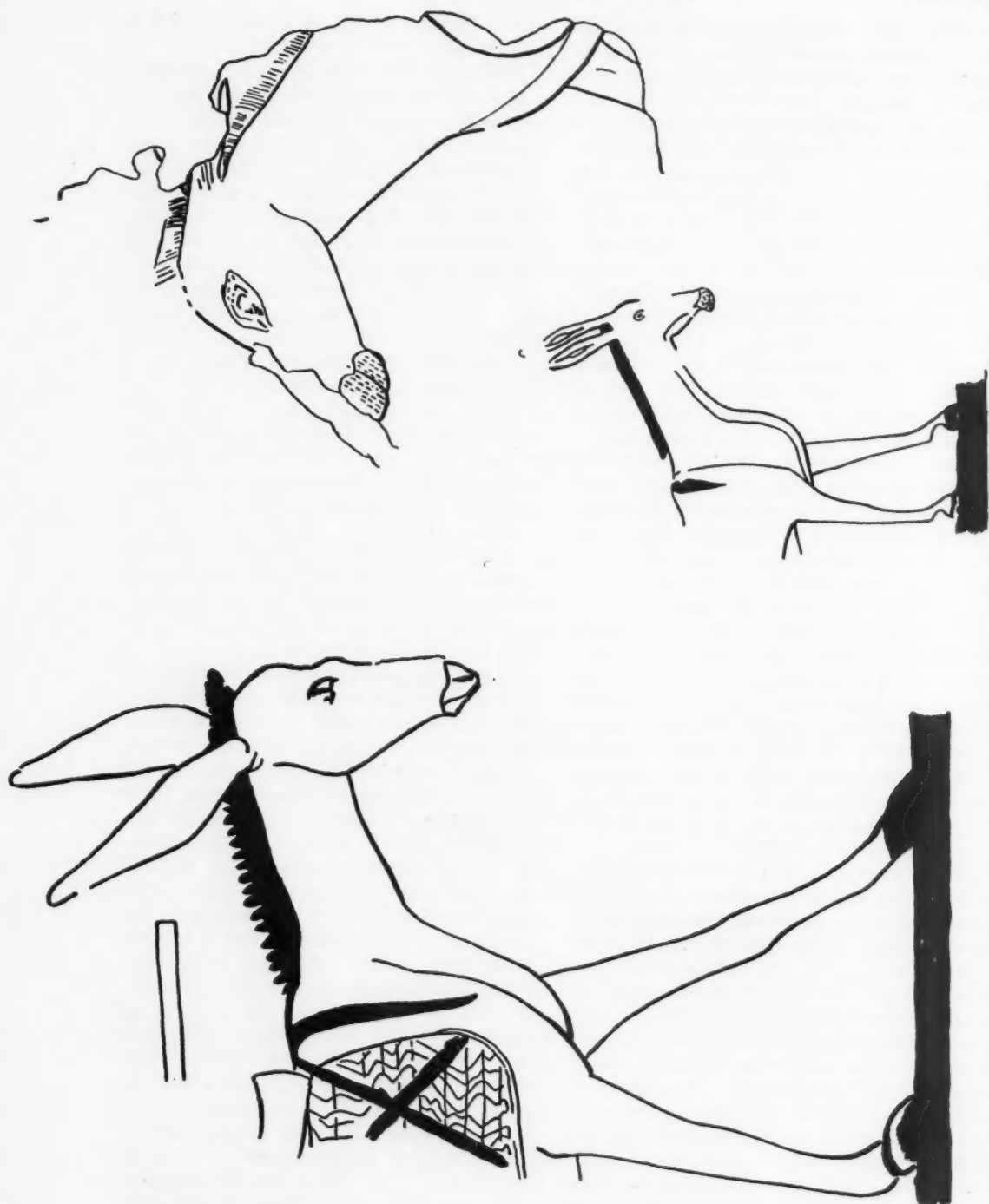


FIG. 5. BENI HASAN DONKEY (DAVIES, *Ancient Egyptian Paintings* PL. 11); BERSHEH DONKEY; GEBELEIN DONKEY (FABIAN, *La Pittura Egiziana* PL. 21).

FIG. 5. BENI HASAN DONKEY (DAVIES, *Ancient Egyptian Paintings* PL. 11); BERSHEH DONKEY; GEBELEIN DONKEY (FABINA, *La Pittura Egiziana* PL. 21).

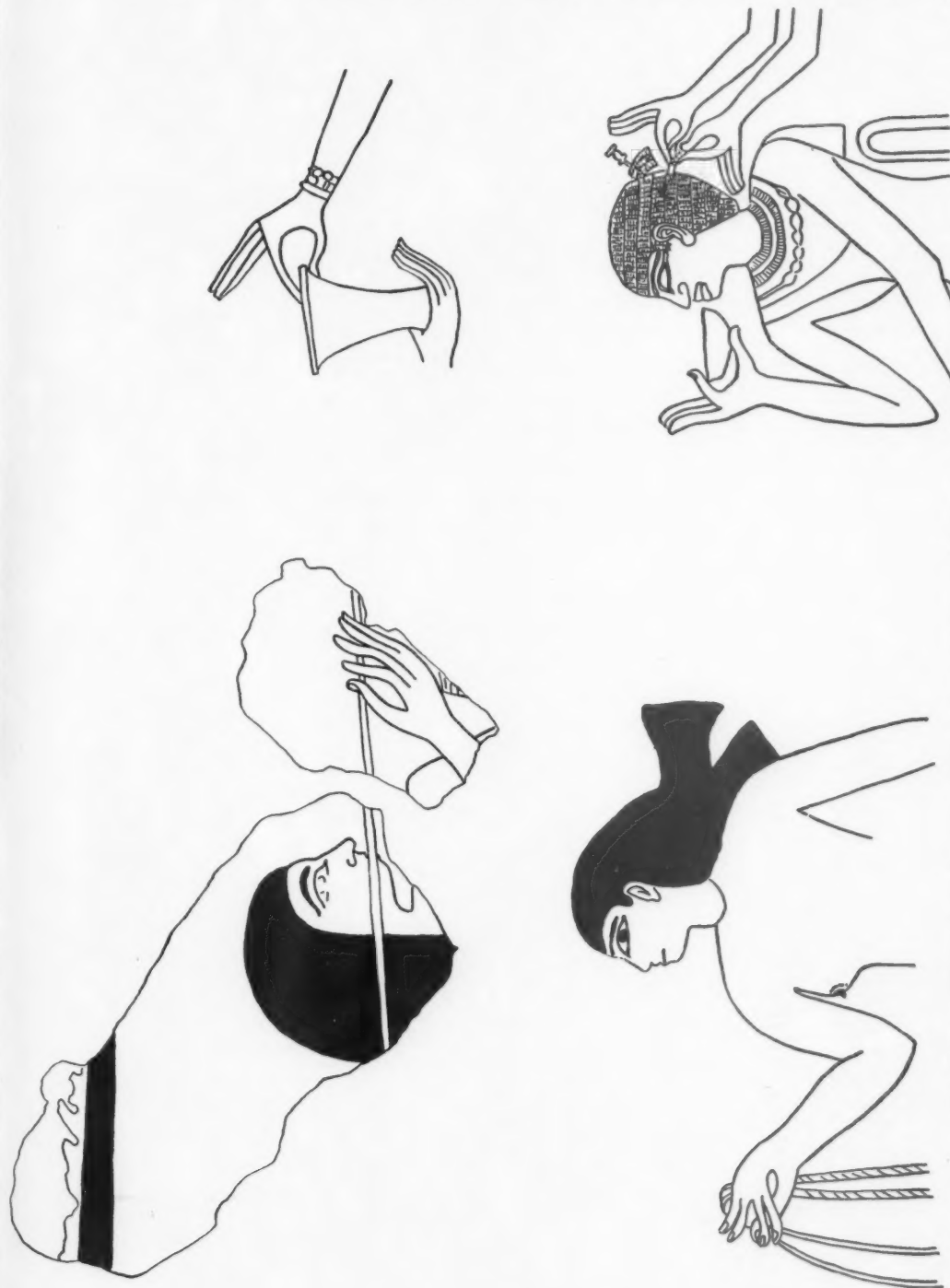


FIG. 6. BERSHEH FRAGMENT; FIGURE IN TOMB OF KHNUM-HETEP (CARTER, ETC., *Beni Hasan* IV, PL. 15); TWO DETAILS FROM KAWIT COFFIN (FROM PHOTOGRAPHS OF PROFESSOR HAMMAN'S MARBERG INSTITUTE).

the exact nature of these differences. We know that the court style of the early Twelfth Dynasty consciously returned to Old Kingdom forms which then vied with a new strain that had entered in from the south in the troubled times after the end of the Old Kingdom. The whole country certainly never attained such unity of style as that which had radiated from Memphis in the Old Kingdom.⁵ However, we are only just beginning to understand this complex art which, toward the beginning of the second millennium, developed out of the chaos of the First Intermediate Period.

MUSEUM OF FINE ARTS, BOSTON
April 1950

¹ J. A. Wilson, "The Egyptian Middle Kingdom at Megiddo," *American Journal of Semitic Languages* 58 (1941) 225-236.

² A. Rowe, *A Catalogue of Egyptian Scarabs*, p. xx; A. Blackman, *Journal of Egyptian Archaeology* 2, 13 ff.

³ P. E. Newberry, *El Bersheh I*, 37 where the block is given in hieroglyphic transcription and its place on the wall identified. It now bears the temporary accession No. 19-4/22-12. I have restored it in the drawing on fig. 1 from a hand copy made in Cairo but have omitted the *n* in *wnwt*.

⁴ Spinning and weaving are again represented in the tomb of Daga (Davies, *Five Theban Tombs* pl. 37) and at Beni Hasan (Newberry, *Beni Hasan* pt. I, pl. 29; pt. II, pls. 4, 13) and Assuan (H. Müller, *Die Felsengräber der Fürsten von Elephantine* pl. 23).

⁵ This piece, with a small fragment of the ceiling showing a yellow quatrefoil pattern against a blue ground, is in the Boston Museum.

⁶ D. Dunham and W. S. Smith, "A Middle Kingdom painted coffin from Deir el Bersheh" in *Scritti in onore di Ippolito Rosellini I* (1949) 263-268.

⁷ Particularly the orchard scene on the north wall of the main hall mentioned by Montet in *Kem I* (1928) 67.

⁸ In the Hare Nome this is particularly evident in the Old Kingdom cemetery of Shiekh Said a little south of Bersheh. The tomb of Weriren there is strikingly similar to that of Khwines at Zawiyet el Meitin further north near Minya, while all the Sheikh Said tombs follow closely the style of the capital.

NOTES AND DISCUSSIONS

A FRAGMENT OF A STELE FROM CYPRUS

J. D. BEAZLEY, Oxford

PLATE 32, A

Paulo Jacobsthal septuagenario.

THE fragment published in plate 32, A was found at Polis tis Chrysochou, the ancient Marion, in western Cyprus, by Mr. Symeon Christodoulou of the Cyprus Forest Service, and presented by him to the Paphos District Museum at Ktima in 1945. It had been lying face downwards outside the door of his house in the middle of Polis, serving as a doorstep. I am much indebted to Mr. A. H. S. Megaw, Director of Antiquities in the island, for sending me a photograph and allowing me to publish it, to Mr. Loizos Philippou, Keeper of the Museum, *ἀνδρὶ φιλοκάλῳ τε καὶ φιλοπάφῳ*, and to Mr. Pavlos Pavlou, helpful guardian. Mr. M. N. Tod has kindly allowed me to consult him on the dating of inscriptions.

The material is marble of rather fine grain with much sparkle and a somewhat sugary appearance: not Island marble; nor had I the impression of Pentelic. The height of the fragment is 73 centimetres, the breadth 66.2. The greatest thickness of the slab is about 12.6 centimetres. The original edge is preserved above and at the left side. At the side a flat ledge, 2.8 centimetres across, has been allowed to remain as a border or listel, from which the marble curves gradually away to the plane of the background. At the top of the slab there comes, first, a cyma reversa moulding; then a slightly broader platband, which runs right round the slab; then a plinth decorated with "acroteria"¹—the left-hand one in profile, the other frontal—which stand out in low relief, with slightly rounded face, from the flat recessed background. The palmettes of the acroteria were not carved, but painted only: faint traces of colour remain. On the flat topside of the plinth a small vertical hole has been drilled above the frontal acroterion, and another above the lateral one. These cannot have been intended to secure an additional member: they may have held short spikes designed to intercept birds and keep them from perching on the marble itself. On the upper edge of the slab there are transverse marks of a claw-chisel; this claw was also used on the side of the slab, and a larger one on the back-

ground of the acroteria. The deep cuts in this background are due to damage only.

A thick tainia or sash, rendered in relief, is shown passing round the left-hand acroterion and in front of the other. In the middle of the rounded end there is a small tassel or tag, from which loose strands may have hung, indicated in paint. The photograph seems to show a row of vertical corrugations along the rounded end, although I did not notice this before the original.

All that remains of the figure-work is forehead, crown, nape, and ear of an old or elderly man, bald, with the head somewhat bent. The scale is over life size, unless the artist was thinking of a very big man indeed: from nape to forehead measures about twenty-four centimetres and a half. The helix and tragus of the ear are chipped, otherwise the head is well preserved.

The large style, and the lowness of the relief in a work of this size, point to a date in the second half of the fifth century B.C. The treatment of the ear, so far as can be judged, agrees. So does the treatment of the hair:—flat and linear, with the locks calligraphically curved and the separate strands that compose them picked out in their full extension. The hair of the Doryphoros of Polykleitos is not unlike this. The hair of the Diadomenos is more advanced. Even in the Doryphoros, if the bronze copy from Herculaneum can be trusted,² the sea was a little more choppy: this would not preclude statue and relief being contemporary. 450 to 420 would be a safe date. If the lower limit is set so late, it is because a comparatively linear, calligraphic—often beautiful—treatment of hair is seen to have persisted in some parts of Greece after it had been generally superseded in Attica;³ and even in Attica the hair of Hermes in the Orpheus relief, the original of which is usually assigned to the twenties, is still of this sort.⁴ Most readers, however, will agree that 420 is too late for the Ktima relief, and that a date about 440, or a little earlier, is most likely.

The stele must have been sepulchral, not votive. If it were votive, the figure would have to represent not a votary (because of its great size),⁵ but either a god or a hero. A bald god is not possible;⁶ and even a bald hero is hardly in keeping with the high style of sculpture in the classic period: an aged hero—say Teiresias—would be given at least a full head of hair,

and by preference a real mane. The stele should therefore be sepulchral. Even in a sepulchral stele the baldness is remarkable: if our dating is correct, this is the earliest extant example of baldness in a sepulchral stele. The gravestone of Kineas and Phrasimeda, from Pherai, in Halmyros, comes to mind:⁷ but although Kineas has the appearance of an old man, he is not bald.

Another unusual feature is the plastic tainia. The custom of tying sashes round sepulchral stelai is familiar from many pictures on Attic white lekythoi, Italiote funerary vases, and other monuments.⁸ A sash painted on the stele translates the time-honoured mark of respect into a more permanent form; and a carved sash is still more durable. More or less simple gravestones of marble with sashes painted on them are not infrequent in Attica and elsewhere;⁹ and a clay stele, decorated with a light yellow sash, was found in the Capo Soprano cemetery at Gela in Sicily.¹⁰ As to plastic renderings of sashes, as opposed to simple painting, they are naturally common enough when the sash forms part of the scene represented in the relief, as for instance in the late-fifth-century votive stele from Samos¹¹ or in Melian clay plaques.¹² This is a different matter from the plastic sash decorating the tombstone itself, of which there seem to be no examples, apart from the Ktima stele, until the Hellenistic period. In a class of fourth-century Attic gravestones, where the sole or chief subject is the representation of a loutrophoros in relief, a short sash is often seen hanging round the handles:¹³ at first glance this might seem to be of the same kind as our sash, but of course it is not: the sashes on the loutrophoroi form part of the subject. The plastic sash of the Ktima sort does not occur again till Hellenistic times: the tombstone of the shipwrecked Glykon, from Rheneia, in Mykonos, has a plastic sash, and Michaelis, who publishes it, quotes other examples.¹⁴

The clay stele from Gela was conjecturally dated by Orsi to the turn of the fifth and fourth centuries. Some of the Attic tombstones with painted sashes are still fifth-century:¹⁵ but none of them seem to be quite so early as the Ktima stele with its plastic sash.

A sash, it might be said, is a sash, and there cannot be much difference between one rendering and another. This may be so: but looking at the tainia on the great stele from Samos,¹⁶ which belongs to the next generation, one feels that this sculptor, if he had been asked to carve a sash on a gravestone, would have contrived to give it a flutter and flimsiness which the Ktima sash has not. Ours is a serious sash.

The sash must have been arranged symmetrically. The missing right end must have been like the left, and have been fastened round an acroterion. The folds on the right, just before the fragment ceases, seem to show a slight upward trend, suggesting that

the relief is preserved in more than half its original breadth, and that only a single acroterion is missing, the one at the right corner. If this is so the top of our stele has a very unusual form. A trio of acroteria—one in the middle, frontal, and one at each corner, in profile—is extremely common in stelai, but only when it crowns a triangular member—a pediment or the like—: whether the stone between the projections is cleared away so that they stand free, or allowed to remain, as here, for a background against which they show in relief.¹⁷ That three acroteria should crown a flat top is very rare. Flat-topped stelai, votive or sepulchral, there are in plenty; but if they are furnished with acroteria, there are quite a number of these, ranged like small antefixes on the long side of a building, which is indeed what they imitate.¹⁸ The Ktima type—flat-topped, with a trio of acroteria—does not certainly reappear until the Hellenistic period,¹⁹ when there are two examples. One, a stele from Delphi,²⁰ bearing a decree in honour of the poet Amphiklos of Chios, belongs to the archonship of Amyntas, who held office either in the year 246/5 B.C. or shortly after. The other, a votive stele from Piraeus,²¹ dedicated by a sailor to the Dioscuri, is dated by Svoronos in the second century B.C. In both these reliefs the acroteria have a background as at Ktima. In an Attic tombstone of the Roman period there is no background.²²

The Ktima fragment is therefore the oldest example of a rare variety of stele. More than this: none of the stelai, votive or sepulchral, of the common type in which a flat top is surmounted by a whole row of acroteria or rather antefixes seem to be as old as ours. The gravestone of Sosinous of Gortyn, in the Louvre,²³ is still fifth-century, but later than the Ktima fragment. The gravestone of Euempolos in Athens²⁴ is placed at the end of the fifth century by Conze, but the style of the figures points to the early fourth, and Tod would date the lettering in the fourth. The well-known stele of Demokleides is of about the same period.²⁵

If there is only one acroterion missing, the original breadth of the stele may be reckoned as about 97 centimetres. The original height depends upon whether the figure of which part remains was seated or standing. If standing, the man was probably leaning on his stick. He was more likely seated. If so he was probably alone, as there does not seem to be room for another full-sized figure, the head and back being well away from the left border. I should like to think that the man was a poet or musician, and held a lyre, or a book: a lyre like the youth on the stele in Munich published by Diepolder,²⁶ a volume like the youth on the stele in Grottaferrata,²⁷ the youth or man on the stele from Cirrha;²⁸ one might also remember the actor in Lyme Park,²⁹ who sits holding a mask; or the

gravestone of the Theban Potamon in Athens,³⁰ where the aged musician Olympichos (pupil of Pindar) sits holding a flute in his lap with one hand and gives the other to his disciple Potamon who stands in front of him. It is only a guess that the greybeard of the Ktima relief is a poet or a musician; but surely he is no ordinary man.

There is one feature of the slab that has been mentioned already, but not discussed: the flat ledge or listel at the side, from which the marble curves gradually away to the plane of the background. This kind of side-border is common in archaic reliefs,³¹ and is still found in the fifth century, but not in the fourth. It does not occur in Attic reliefs, either sepulchral or votive, of the classic period: the fifth-century examples are all non-Attic. The last of them is not later than 420.³²

Can it be said to what school the sculptor belonged, or from which part of Greece he came? He was not a Cypriot Greek, but from Greece proper, whether he carved the stele on a visit to Cyprus, or carved it to order in Greece and had it conveyed to the island. The great series of classic gravestones in Attica begins after the date to which the fragment in Ktima has been assigned: so that comparison is not so easy as it would have been with contemporary stelai: but considering how much is known about other kinds of relief in the Attica of this period, one would have expected if the stele were Attic to find more resemblances in Attic work; and the "listel" at the side is perhaps against it being Attic.³³

It is agreed that many of the non-Attic sepulchral reliefs of the second half of the fifth century, and many of the finest, are by Island sculptors. Ours may be so too. The material, as was said, does not seem to be Island marble: but this is not proof to the contrary, as the sculptor may not have been working at home.

The Peloponnese, however, cannot be excluded. Elaborate gravestones do not appear to have been a general custom in the Peloponnese of the fifth and fourth centuries:³⁴ but there were some, and there is no reason why a Peloponnesian artist should have declined such a commission.

Below the rounded end of the tainia, where it passes in front of the side-border, the border is cleared away for a little distance. Perhaps there was a flaw in the marble here, which the sculptor has excised; and that seemed to be the explanation of a small shallow round cavity in the hair, north-east of the ear, half way to the crown.

Of the Greek marbles found at Marion, the Ktima fragment comes second in order of time: later than the sixth-century statue of a boy in the British Museum,³⁵ earlier than the two fourth-century Attic tombstones in Cambridge³⁶ and Nicosia.³⁷

March 1950

¹ I use this term, for convenience, in the wider sense in which it is used, sometimes at least, by Conze and his collaborators.

² BB. pl. 336; Bulle *Der schöne Mensch* pl. 47; Winter *K.i B.* p. 257, 6-7; Richter *Sculpture and Sculptors of the Greeks* fig. 645.

³ *Jb.* 41, 133 (Pfuhl); Jacobsthal *Die melischen Reliefs* 159-160.

⁴ RM. 53 pll. 32-3.

⁵ *Jb.* 49, 54 (Möbius).

⁶ Nereus, for example, does not come into question.

⁷ *AM.* 29 pl. 22; Winter *K.i B.* 239, 4; *AM.* 65 pll. 79-80 (Brommer).

⁸ E.g. Jacobsthal *Die melischen Reliefs* pl. 1, pl. 53, and p. 181.

⁹ Conze *Die attischen Grabreliefs* nos. 1325-1334, pll. 279-280 and pp. 287-289, from Attica: Möbius *Die Ornamente der griechischen Grabstelen* pl. 53, a, from Demetrias (founded 295 B.C.), third century B.C.

¹⁰ *N.S.* 1900, p. 278; *ML.* 17 p. 521.

¹¹ *AM.* 25 pl. 13 and pp. 69-70 (Wiegand); Jacobsthal *Die melischen Reliefs* p. 159, dated in the twenties of the fifth century.

¹² Jacobsthal *Die melischen Reliefs* pll. 1 and 53.

¹³ Conze pl. 283, 1350; pl. 285, 1356; pl. 286, 1359; pl. 373, 1734; p. 367 no. 1727; Riemann in *Kerameikos* ii pl. 14, 42 with p. 45; also Conze pl. 216, 1062. A sash tied round the neck of a lekythos, Conze pl. 353, 1659.

¹⁴ *AZ.* 1872 pl. 53, A, 1, with pp. 147-8. Late cippi from Athens, Conze pl. 473.

¹⁵ The stele of Aristippos of Lampsacus (Conze pl. 308, whence Möbius *Ornamente* pl. 62, a, with p. 70) is still fifth-century according to Möbius, judging by the style of the palmette; on epigraphical grounds Tod thinks that it is probably late-fifth-century although the early fourth is not absolutely excluded.

¹⁶ Above, note 11.

¹⁷ As for example in the stele of Xanthippos in the British Museum (Conze pl. 119; Diepolder *Die attischen Grabreliefs* pl. 4). On stelai crowned by 'pediments', in general, Brueckner *Ornament und Form der attischen Grabstelen* pl. 2, 1-4 and 6-8, and pp. 41-52, Möbius *Ornamente* p. 14.

¹⁸ Brueckner pl. 2, 5, with pp. 51 and 77-8.

¹⁹ A fourth-century stele that faintly recalls our type is the tombstone of Leon of Sinope (Conze pl. 276 no. 1318, with p. 285): the top is flat, and a small acroterion rises from each corner: but there is none in the middle. There is also the simple tombstone, found at Piraeus, of Xeneia of Ceos—another stranger in Attica—(Conze pl. 299, 1446): it has no figure-work; Koehler dates the inscription in the fifth century, Tod to the end of the fifth or the beginning of the fourth. The upper termination is described by Conze as consisting of three acroteria, and the projection in the middle may in fact be meant for an acroterion like the two others: but I do not feel sure that it is not a dwarfed 'pediment': compare Conze p. 310 no. 1449.

²⁰ *BCH.* 1896 p. 559 (Perdrizet); the inscription, *F.D.* iii, 3 pp. 181-3 no. 217 (Daux); on the date of the archon Amyntas, also Daux *Chronologie delphique* p. 44, K3.

²¹ Svoronos pl. 33, 1409.

- ²³ Conze pl. 421, 1961.
- ²⁴ Conze pl. 119, 618; *Enc. phot.* iii p. 170. See Diepolder p. 27.
- ²⁵ Conze pl. 133.
- ²⁶ Conze pl. 122; see also Wolters in *Antike Plastik* . . . *Amelung* pp. 275-6.
- ²⁷ *Mü. Jb.* n.s. 3 p. 259.
- ²⁸ Conze pl. 121; phot. Moscioni 8421, whence Möbius *Ornamente* pl. 6, with p. 18, whence Picard *La sculpture* iii p. 251 (the "symbolic lion" is surely a dog?).
- ²⁹ Stackelberg pl. 2, 3; *Annali* 1855 pl. 16: Roman period?
- ³⁰ *JHS.* 23 pl. 13.
- ³¹ *Eph.* 1903 pl. 8: the humble relief is of a common type (compare for example Conze pl. 127-8), but was evidently made to order not bought from stock.
- ³² E.g. Richter *Archaic Attic Gravestones* figs. 61, 62, 64, 70, 71, 93. A few examples from the second half of the fifth century: stele of Amphotto, from Thebes, in Athens (*Jb.* 26 p. 59; *Jb.* 28 p. 321); stele of Philis, from Thasos, in the Louvre (BB. pl. 232, *K.i B.* p. 239, 2; *BCH.* 1931 pl. 21, Devambez; phot. Giraudon 1026); stele, youth with hound, from Thespiiai, in Athens (*Jb.* 28 pl. 25, 1).
- ³³ Athens, from Thespiiai (stele of a youth): *Jb.* 28 pl. 25, 1. Some other fifth-century examples:
Delphi, from Delphi (stele of an athlete): Bulle *Der schöne Mensch* pl. 265.
Berlin, ex Giustiniani (stele of a woman): Jacobs-thal *Ornamente griechischer Vasen* pl. 139, a; Blümel *Die griechischen Skulpturen des fünften und vierten Jahrhunderts* pl. 27; Richter *Sculpture* fig. 427.
Aegina, from Aegina (stele of a youth, who lays his hand on the head of a little boy): *A.D.* i pl. 33, 3, whence Winter *K.i B.* p. 287, 7; *Jb.* 22 p. 116 fig. 4. See also Karouzos in *BCH.* 1938 p. 103.
Athens, from Boeotia (stele of Amphotto): *BCH.* 15 p. 448; *Jb.* 26 p. 29; *Jb.* 28 p. 321.
Louvre, from Thasos (stele of Philis): BB. pl. 232; *K.i B.* p. 239, 2; *BCH.* 1931 pl. 21, Devambez; phot. Giraudon 1026.
Istanbul, from Pella (stele of a warrior): *BCH.* 1884 pl. 11; *Jb.* 28 p. 318; Bulle *Der schöne Mensch* pl. 264, 2.
Vatican (stele of an athlete): *Jb.* 18 pl. 8, see *Jb.* 24 pp. 192-3; Winter *K.i B.* p. 287, 4. Usually considered to be non-Attic; Attic according to Lippold (*Gnomon* 10 p. 194), but the listel, so far as it goes, is perhaps against this.
- ³⁴ The capture of Marion by Kimon in 449 is irrelevant.
- ³⁵ See *Jb.* 49 pp. 55-8 (Möbius). Fragments of tombstones from Corinth: F. P. Johnson *Corinth ix: Sculpture* pp. 120-1 no. 246 (and 245?); *Delt.* 4, first paratema, p. 3 fig. 3; *AJA.* 1933 p. 440 (de Waele).
- ³⁶ Pryce *Cat. Sculpt.* i pl. 34; Richter *Kouroi* pl. 120 no. 147.
- ³⁷ *JHS.* 11 p. 14.
- ³⁸ Described but not figured by Dikaio in his *Guide to the Cyprus Museum* p. 101.

A BOEOTIAN BELL-KRATER IN ROCHDALE

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PLATE 33

LULLIES' article on Boeotian red-figure painting,¹ recently received in this country, prompts me to add to his list of works by the Painter of the Argos cup² a bell-krater from the Bright collection in Rochdale museum. On it are painted: (pl. 33) *a.* Dionysus pouring a libation, and maenad. *b.* Apollo pouring a libation. John Bright, the Lancashire statesman, whose family home was in Rochdale, owned the vase, and may have acquired it on a tour of the Eastern Mediterranean in 1836. In 1939, it was in fragments, and was mended at Manchester University.³ It is 21.5 cm. high; its clay is pale ochre and is porous. A piece of the foot is missing, and also fragments above the handles. The shape is not quite true, and the handles are not set horizontally.⁴ The glaze is a dark brown, and its original surface is preserved in only a few places. A narrow band at the junction of foot and body is left in reserve, and also the side of the foot. The interior is glazed, with two narrow reserved bands and traces of a third broader band. The glaze is almost entirely gone from the interior of the foot.

The painting is hasty; under the handles the palmettes are unsymmetrical; so too are the laurel pattern⁵ and the egg pattern. The inner-markings have become in many places a light brown, and some are obliterated because of flaking and cracking on the glazed surface, as for instance on the right breast and arm of Artemis and below Apollo's right arm. There are many traces of the preliminary sketch, which the painter often neglected when drawing the outline stripe of glaze; for instance, the stripe cuts off the preliminary sketch of the folds hanging from Artemis' right arm, and it deviates from the outline of Dionysus' phiale and the hands of Artemis and the maenad. Unfortunately hardly visible on the photograph is the preliminary sketch of the object onto which Apollo is pouring the libation, and which the artist never completed. It is presumably an altar, but owing to the flaking of the surface and the crack which intersects the sketch it is impossible to decide what it was; part of it resembles an animal's head. Another mark of hasty workmanship is the improbable angle of refraction on the haft of the maenad's thyrsus as it passes behind her back.

The attribution of this vase to Lullies' Painter of the Argos cup is unquestionable; Apollo and Artemis are a careless version of the Apollo and Artemis on the Athens bell-krater.⁶ The Rochdale vase shares with all Lullies' attributions the bold but careless outline

drawing, and the schematic ornamental inner-drawing. Similarity of profile, hair and beard is obvious; other points for comparison between the Rochdale painting and Lullies' attributions are:—Whole figures: Apollo, nos. 2, 5; Artemis, no. 5. Hands: grasping cup, nos. 2, 5; of lyre player, nos. 2, 5, 8 and cf. 10; grasping stave, nos. 1, 2, 3, 5, 8, 10. Arm foreshortened: nos. 1, 5, 7, 8. Boots: nos. 1, 3, 4, 10, 11. Bulbous toe: no. 8. Decoration by rough spots: nos. 1, 2, 3, 4, 5, 8. Typical of this painter, and of Boeotian painting in general as compared with Attic work of the period, are the awkwardness and immobility of stance, the lack of feeling for depth, and the flat unrealistic fold patterns.

Lullies is an authority of such eminence on the whole question of Boeotian dependence upon Attic models in painting and sculpture that one hesitates to disagree with him; he names the Marlay painter and the Shuvalov painter (in general, a painter of much livelier scenes than the Boeotian painter), and, to a smaller extent, the Washing painter, as the artists who influenced the painter of the Argos cup. But it seems that he was influenced even more by the painter of the Louvre Centauromachy. Similarities between their work are so marked, especially on the painter of the Louvre Centauromachy's careless or later paintings and paintings on the reverse of vases, that it cannot be entirely due to the accident of preservation. One notices the rather wooden movement,⁷ the immobile figures,⁸ the peculiar stance of figures with foreshortened arm, holding thyrsus, etc.,⁹ the foreshortened arm,¹⁰ the plump shapeless limbs,¹¹ the hand on hip,¹² the clumsy fingers,¹³ and the flat schematic drapery.¹⁴ Drink-offering scenes occur in the late work of the painter of the Louvre Centauromachy¹⁵ as on the Boeotian paintings;¹⁶ and on the very late pelike in the Louvre,¹⁷ treatment of hair and decoration by rough spots has close parallels on the pictures by the painter of the Argos cup.

The absolute dating of Boeotian paintings sets a difficult problem; it is often impossible to arrange the works of one painter in chronological order.¹⁸ The painter of the Argos cup may have used as his models Attic vases painted before 431; Boeotia played a continuous and energetic part in the Peloponnesian war from 431 to 421, and one can assume that the contact of Boeotian with Athenian artists and the export of Attic pottery to Boeotia was interrupted. Evidence for this may be adduced from the *Acharnians*,¹⁹ produced in 425. After the peace of Nicias, however, contact would have been reestablished, though from 421 to 414, peace between Attica and Boeotia was precariously maintained by a truce renewed every ten days.²⁰ If the painter of the Argos cup was active between 430 and 420, his works are among those referred to by the Boeotian in the *Acharnians*. But

as his style takes over elements from the later works of the painter of the Louvre Centauromachy,²¹ it is more likely that the vases attributed to him were painted between 420 and 410.

The only religious subjects of the painter of the Argos cup are, as on the Rochdale krater, Apolline and Dionysiac.²² On Lullies' no. 8, Apollo and Dionysus appear together; this is rare on Attic paintings, and I cannot recall an example between the archaic period and the date of the painter of the Argos cup.²³ It is rare even to find one of the deities on the obverse and the other on the reverse;²⁴ Apollo is sometimes represented on the obverse with satyrs and maenads on the reverse,²⁵ while in the later classical period and afterwards, Apollo is painted in the company of satyrs and maenads.²⁶ One could but expect Dionysus to be a popular figure in Boeotian art, since Thebes was his legendary birthplace and Boeotia was a centre of his cult.²⁷ Guthrie argues that there was a connection between the cults of Dionysus and Apollo in the Homeric age;²⁸ in the succeeding centuries the link became stronger, and Macrobius²⁹ attempts to prove that in the fifth century Apollo and Dionysus were identified as one. At all events, the alliance of Dionysus and Apollo had become established at Delphi by the fifth century,³⁰ and at some period Dionysus was thought to take Apollo's place there during his absence for the three winter months.³¹ Apollo, the "national divinity of the Greeks," had a sanctuary in Thebes,³² where in his honor was celebrated the Daphnephoria. Local legends claimed for him too a birthplace in Boeotia.³³ But it is probably the alliance of the two gods at Delphi which prompts the Boeotian artist to paint them together. The oracle was wholeheartedly anti-Athenian in the first phase of the Peloponnesian war,³⁴ and must have been almost continuously in the hands of the Peloponnesian league. Apollo at the oracle is the subject of the picture on a krater by the Judgement of Paris painter,³⁵ probably to be dated in the 420's. After the peace of Nicias, although anti-Athenian oracles continued, relations between Athens and Delphi improved, but they were never cordial till after 404.³⁶ And it is towards the end of the century and in the fourth century that Athenian painters represent Apollo and Dionysus together.

Behind the Delphic tripod on the Judgement of Paris painter's krater there is a bukranon;³⁷ there is another between Dionysus and the maenad on the Rochdale krater. Before an ox was sacrificed, its horns were gilded, probably with a soft amalgam of gold and mercury;³⁸ in that case, after burning, the horns would remain covered with gold leaf.³⁹ After the sacrifice, the remains, when they were regarded as belonging to the god, were not to be removed, and the skulls of the victims were mounted on temple wall or tree in the enclosure; therefore on vase paintings,

when fixed to walls, columns or stage scenery, they denote a sanctuary. I can recollect no reference in literature to bukrania in this sense. In the fourth century and later, on sculptured reliefs, sarcophagi and relief vases, they are very frequent; inscriptions also record dedications of bukephalia, some of them golden.⁴⁰ Beazley⁴¹ shows that in the fourth century they were used as decorative motives on vases, and says that single ox-skulls, or a couple of them, very often appear on fifth and fourth century vases. On the pictures I recall,⁴² they would appear to be rare in the early fifth century, but to become increasingly common in the last quarter of the century and later; the two Boeotian bukrania, therefore, were painted before they became a commonplace motive. Bukrania cannot be exclusively connected with any particular deity or cult; naturally they very often represent Delphi and scenes from myths set at Delphi. Possibly the Delphic cult explains their popularity on Italiote vases, and may also explain some of the nebulous cross-connections between Boeotian and Italiote painting.

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¹ *AM* 65 (1940) 1 ff.

² *Op. cit.* 15 ff.

³ I understand that Beazley then connected it with skyphoi Berlin 3413 and Tübingen F 3, Lullies' nos. 4 and 7, and that he grouped as close to these the skyphoi Athens C.C. 1345, 1342, Berlin 3412, Lullies' Painter of the Judgement of Paris nos. 1, 2, 3.

⁴ As on Lullies' no. 2, pl. 14, and many other Boeotian vases.

⁵ Boeotian painters appear to have preferred the laurel pattern running left, as here, but there are examples of it running right, as on the krater from the Thespian Polyandron, Lullies p. 10, pl. 7. On both Attic and South Italian vases, patterns in either direction are found; cf. Trendall, *Frühitaliotische Vasen*, n. 6.

⁶ Lullies' no. 2, pl. 14.

⁷ Lullies' nos. 1, 3, 4, 7, 10, 11. Beazley, *ARV* p. 709 ff., nos. 2, 19, 24, 30 ("late"), 37, 41, 46 ("late"), 54, 59, 79. (Refs. to Beazley are to *ARV* unless otherwise stated.)

⁸ Lullies' nos. 1, 2, 8. Beazley, nos. 1, 2, 12, 24, 31 ("late"), 37, 50 ("late"), 58, 59, 64 ("very late").

⁹ Rochdale. Lullies' nos. 5, 7, 8. Beazley, nos. 41, 67, 70, and the not dissimilar stance of the woman on no. 2.

¹⁰ Lullies' nos. 1, 4, 6, 7, 8, 10, 11. Beazley, nos. 2, 12, 19, 37, 41, 46 ("late"), 54, 64 ("very late"), 67, 70, 79.

¹¹ Rochdale. Lullies' nos. 1, 3, 4, 5, 6, 7, 8, 10, 11. Beazley, nos. 1, 19, 24, 30 ("late"), 31 ("late"), 41, 46 ("late"), 50 ("late"), 54, 58, 64 ("very late"), 67, 70, 79.

¹² Lullies' nos. 7, 8, 10, 13. Beazley, nos. 1, 24, 31 ("late"), 46 ("late"), 64 ("very late").

¹³ Rochdale. Lullies' nos. 1, 2, 3, 4, 5, 6, 7, 8, 10, 11. Beazley, nos. 1, 19, 24, 41, 46 ("late"), 50 ("late"), 54, 79. Fingers grasping cup: Rochdale. Lullies' nos. 2, 5. Beazley, nos. 30 ("late"), 64 ("very late"), 70.

¹⁴ Rochdale. Lullies' nos. 1, 2, 3, 5, 8, 10, 11. Beazley, nos. 1, 2, 12, 24, 31 ("late"), 37, 50 ("late"), 54, 58, 59, 64 ("very late"), 67, 70.

¹⁵ Beazley, nos. 30, 31, 64.

¹⁶ Lullies', nos. 2, 5, 6.

¹⁷ Beazley, no. 64.

¹⁸ Lullies', *op. cit.* 17.

¹⁹ Lines 902 ff., 928.

²⁰ Cf. Aristophanes *Birds* 188.

²¹ Beazley, *JHS* 59 (1939) 14, dates nos. 46 (Al Mina no. 40) and 50 (Al Mina no. 39) about 425 B.C. In *ABS* he calls these "late," and no. 64 "very late," (I presume 420 or later). The close connection of no. 64 with those of the painter of the Argos cup has been noticed above.

²² Rochdale. Lullies', nos. 1, 2, 3, 5, 6, 8.

²³ Among the Attic paintings of Dionysus and Apollo together there are: *Archaic*: Hydria of Leagros group, Beazley, *ABS* no. 41. Hydria, Athens, C. C. 751, Beazley, *ARV* p. 954. Nikoxenos ptr. no. 1, 32. Ptr. of Munich 1519, no. 7, etc. *Later Classical*: Manner of Dinos ptr. no. 10, (though here they appear together as wedding guests. They also appear together in large groups such as gigantomachies.) Kadmos ptr. no. 5. *Fourth Century*: Erbach ptr. nos. 4, 5. Ptr. of Louvre G 508, no. 5. Lyons, Schefold, KV pl. 21. etc. They also appear together on: London F 77; Leningrad, Stephani 1807.

²⁴ Menon ptr. no. 2. Altamura ptr. no. 39. Villa Giulia ptr. no. 65. Blenheim ptr. no. 3. Manner of Niobid ptr. no. 18. Kadmos ptr. no. 1.

²⁵ *Early Classical*: Ptr. of Bologna 228, no. 3. Niobid ptr. no. 39. *Classical*: Danae ptr., probable no. 2. *Late Fifth Century*: Semele ptr. no. 2.

²⁶ Dinos ptr. no. 27; Pothos ptr. no. 14; Erbach ptr. no. 2; Meleager ptr. no. 11.

²⁷ Nilsson, *History of Greek Religion* 207. Parke, *History of the Delphic Oracle* 335 ff. O. Gruppe, *Griech. Myth.* (1906) 211, maintains that the Dionysus cult originated in East Boeotia and Euboea.

²⁸ *Orpheus and Greek Religion* Chap. III, esp. 46.

²⁹ I 18, quoting *inter alia* Aesch. frag. 341 N. and Eur. frag. 477 N.

³⁰ Roscher, *Lexikon s.v.* Dionysos. Parke, *op. cit.* 15.

³¹ Pickard-Cambridge, *DTC* 9, referring to Cook, *Zeus* II 233-67. Parke, *loc. cit.*, says evidence for Apollo's absence goes back to the sixth century, but that it is not possible to prove that Dionysus was thought to take his place before the time of Plutarch. But there are several fourth century vase-paintings of Dionysus at Delphi, (eg. Leningrad Steph. 1807, etc.), and on the Lyons hydria (Schefold, KV pl. 21), he sits on the omphalos. Cf. also Dodds, *Bacchae*, I. 306, note.

³² Hdt. V 59.

³³ Steph. Byz. s.v. Tegyra. And cf. the story, which Plutarch (*Moral.* 412 C) derived from a Boeotian source, of the Delphic oracle in 421 sending the Delian exiles to the birthplace of Apollo—Tegyra.

³⁴ Parke, *op. cit.* 203.

³⁵ Athens, N.M. 1385, C.C. 1342, Lullies, *op. cit.* no. 2, p. 13, pl. 9.

³⁶ Parke, *op. cit.* 208.

³⁷ Cf. ram's skull in similar position on krater from Al Mina, Beazley, *JHS* 59 (1939) p. 41, no. 86.

³⁸ Homer, *Odyssey* 3.437, and Stanford *ad loc.* quoting Pinza, *Hermes* 43 (1908) 468 ff.

³⁹ Cf. on Tübingen E 183, gold preserved on horns of bukrania.

⁴⁰ Cf. Rouse, *Greek Votive Offerings* 69, 399, 403.

⁴¹ *JHS* 59 (1939) 36 ff.

⁴² Obviously a very incomplete list, but perhaps sufficient to indicate the spread of popularity of bukrania as motives in painting: (the asterisk denotes vases quoted by Beazley *loc. cit.*) *Early Classical*: Niobid ptr. no. 58; *Duomo* ptr. no. 5. *Classical*: Thomson ptr. no. 5. *Later Classical*: Manner of Kleophon ptr. no. 1. *Late Fifth Century*: Villa Giulia 2382, related to Talos ptr.; Manner of Nikias ptr. no. 2; Polion no. 4. *Fourth Century*: Tübingen E 183; London E 428, E 482, E 505; New York 24.97.5; Athens N.M. 12592; N.1104; Oxford*, Al Mina no. 86. *Italiote*: Lost Apulian Greek mascaoon krater*, (Mon. IV, pl. 30); Naples* 3230; London* F 159; Vatican* (Séchan, *Trag. grecque* p. 182); Lecce*, CV II Dr pl. 22,2; Naples 2411; Hermitage, Steph. 523; Steph. 880; Naples 3253, 3254; London F 271; F 418. *Phlyakes*: London* F 269; Bari, (Bieber, *Theater* fig. 371); Naples, (Bieber, *Theater* fig. 385); Camarina, (Bieber, *Theater* fig. 357). *Paestan*: London F 155 (cf. Trendall, *PP* 159, ref. to neck-amphora in Leningrad); Schwerin 269. Also, London F 166; krater in Moscow, Pickard-Cambridge, *Theatre* fig. 16.

THE SHIP-RHYTON IN BOSTON

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PLATE 34

IN the Boston Museum of Fine Arts there is an unusual drinking-vessel (or rhyton, to use a convenient if imprecise term) in the form of a ship with a man reclining in the stern. The rhyton, inv. 99.515, was purchased in the Forman sale in 1899 by E. P. Warren and was acquired by the Museum in the same year. It was described (no. 264) in the Forman Sale Catalogue by Cecil Smith of the British Museum; in the *Annual Report of the BMFA*, 24 (1899) 56-7, by Edward Robinson, with quotations from Mr. Smith's account; and later by A. Fairbanks, *Catalogue of the Greek and Etruscan Vases in the Museum of Fine Arts, Boston* (1928) I, p. 83 and pl. xxiv (no. 277). These descriptions are all short and far from complete.

The vase (ht. 0.15, lth. 0.30, wth. 0.094 m.) is of well-fired pinkish brown clay, slightly glazed, with decorations in a rich black-brown. It has a swelling pot-like underside from which it is supported on three splayed feet, two in front and one behind: see the photograph on pl. 34. The upper part of the vase represents a ship with a clearly-defined animal's-head (presumably boar's-head) ram. This ram is of roughly oblong shape and has an eye painted near its after end on each side. Its upper edge curves sharply and joins the slightly backward-sloping prow or stem-

piece, the upper part of which is missing. From the stem-piece two high bulwarks (perhaps representing mere rails with stanchions) run on each side of the "deck" toward the centre of the ship; the "deck" itself is cambered, and is broken in the middle by a large circular filling-spout. Between the stern-rails, reclining against the high sloping stern (the extremity of which forms the drinking-spout), is a bearded figure, presumably the steersman, with hands on knees. His knees are inside and aft of the forward ends of the stern-rails, which might be confused with them; the man seems to be sitting on a small thwart between these rails—but the modelling here is very rough. There are remains of another figure on the fore bulwarks: see *infra*, p. 341. Decoration consists of: on the ram, all edges outlined in black, and an eye (front view) on each side; on the fore bulwarks, rectangles formed by several vertical and three horizontal lines; on the stem-piece, horizontal strokes between edging-lines; along the upper part of the ship's sides as far as the stern, two horizontal lines enclosing a broken guilloche pattern interspersed with dots; at each side of the central spout, on the "deck," a row of zig-zags or reverse rectilinear sigmas; round the base of the central spout, a circle of dots, and round its lip a black line; on the stern-rails, edging-lines and vertical strokes. The steersman is painted black except for neck and face.

Smith described the vase as "early Attic or Boeotian of the Dipylon period," but Robinson wrote that "the fine lustre of the surface and the glossy black of the decoration would seem to indicate that the vase belongs to the early stages of the black-figured style rather than the Dipylon period." Fairbanks nevertheless classed the vase among those "presumably from Attica," as Dipylon ware. It is at present exhibited as of Geometric style, without any specification of place of manufacture. At first sight the vase might appear to be Geometric. The decoration is undoubtedly geometric in style; but the rhyton cannot belong to the Geometric Period proper, which is usually taken to end at the turn of the eighth and seventh centuries, when in Attica new orientalizing decorative elements replaced the strict geometric technique. That it must be later than this period is proved, if by nothing else, by the ship-type represented. In my paper "Ships on Geometric Vases," *BSA* 44 (1949) 93 ff., I examined the clearly Geometric representations of ships and reached certain typological conclusions, among which the two following are relevant here. First, the stern of the Geometric ship is always represented as curving so sharply that its upper extremity points forward—whether this extremity is a structural part of the stern itself, as in my Groups I and VI, or an appendage in the form of a "horn" with branches as in Group III, the Conventional or

Dipylon ship-style (*loc. cit.* 99 ff., 133 f.). Even in the seventh century this is still usually the case (*loc. cit.*, 119-123). The Boston rhyton, however, has a stern which, although comparatively high, does not curve very strongly and is far from pointing forward at its extremity. This may well be due, of course, to the functional exigencies of the drinking-spout at the tip of the stern. If the artist were trying to imitate the stern on such ships as are represented on e.g. the proto-Attic plaque from Sunium, in Athens,¹ or on the much later François vase,² then he might well have felt at liberty to omit the fragile appendage or goose-neck which curves just over the steersman's head, for this is not a noticeable or important part of the ship; but the huge stern and after horn of the Geometric ship could scarcely be omitted if any degree of realism was to be attained—and the details of the stern-rails and the figure in the Boston rhyton show that a considerable degree of realism was intended. Second and more important, in no extant Geometric ship-representation is the inevitable eye on each side of the bow drawn naturalistically, as it is on the rhyton: it is represented schematically by a circle (rarely a rectangle) filled with four or more radii. Nor are the eyes drawn on the ram itself, as on the rhyton, but on the bow just aft of the ram. Furthermore, the ram in the rhyton does not end in a point, as do all Geometric rams, but is rectangular in silhouette, thus giving a more faithful impression of a boar's snout. In fact there is a distinct development which can be traced in the boar's-head bows of warships: first the Geometric bow, with pointed ram and schematic eye aft of the ram; here the resemblance to an animal's head is only suggested. Secondly the seventh-century bow, represented in the left-hand ship on the Aristonothos crater, in Rome;³ this is the first extant Greek ship-representation in which the eye is drawn naturalistically; but here, as in the Geometric ships, the eye is not on the ram but aft of it. The forward end of the ram is slightly pointed at the bottom, but is rectangular rather than triangular in side-elevation: it thus mediates between the Geometric representations and the Boston rhyton. The Aristonothos crater was made about the middle of the seventh century. Thirdly the long-ship type of bow represented in black-figure paintings of the sixth century, like the Theseus ship on the François vase, mentioned above, or the ships on the dinos made by Exekias, in Rome;⁴ here the ram is made to form a close imitation of a boar's head (not merely of the snout), both in its silhouette and in the added details which are painted in on each side in addition to the eyes. Thus by this important criterion the Boston rhyton is post-Geometric, and comes between the Aristonothos crater and the black-figure ships; it might therefore be dated somewhere round 600 B.C.⁵

The fabric of the vase tells very little about its date. It is true, as Robinson observed, that the slight glaze and the lustrous black-brown paint could be matched by some of the earliest black-figure ware; but then Attic Geometric ware of the last half of the eighth century, especially that found in the Dipylon area, shows a great variety of surfaces and colours, and there would certainly be no reason to preclude either an eighth- or a seventh-century date on the ground of fabric and paint. If the vase is to be dated around 600 B.C. by the manner of representing details of the ship, then an Attic origin is out of the question, in view of the geometric type of decoration. The most likely place of manufacture in this case is Boeotia, since it was only here, among centres which used this reddish clay with no slip, that purely geometric decoration survived as late as this and even later. One may compare the sixth-century Boeotian pottery in the Akademisches Kunstmuseum in Bonn,⁶ where the decoration is of the rather heavy-handed geometric type seen on the Boston rhyton; but the "coarse reddish gritty clay characteristic of the class" (*loc. cit.*) has little in common with the fine clay of the rhyton. Of the decorative elements, none can be associated specifically with Boeotia, although none are foreign to it; and in any case the Boeotian vase-painters were great imitators. A broken guilloche pattern similar to that on the sides of the rhyton, but without the interspersed dots, is found on a Boeotian Geometric amphora in Copenhagen⁷—but also on an early-Corinthian pyxis in California.⁸ On a Boeotian archaic kylix of the mid-sixth century⁹ is a truer guilloche pattern which is again not dissimilar.¹⁰ The best parallel to the dot-interspersed pattern of the rhyton is found on fragments of a proto-Attic crater in Berlin,¹¹ where it is exactly reproduced, including the thickly drawn lines. With finer lines it occurs on at least two other proto-Attic pieces—a crater in Munich (inv. 1351) and a lid in the British Museum;¹² also on two Fikellura sherds from Naucratis, in Boston.¹³ These sherds belong to the sixth century; Fairbanks remarked (*op. cit.*, 95) that the guilloche pattern is not uncommon on Naucratic pottery. All that can be safely deduced from these parallels is that the broken guilloche pattern, and especially the dot-divided broken guilloche, although not a common form of decoration, was not confined either to one place of manufacture or to one century; but the dot-divided pattern does not appear to occur before the beginning of the seventh century. The rectilinear reverse sigma pattern on the "deck" is commoner; it occurs, for example, over a continuous horizontal line and a row of dots, on a bowl found in Athens¹⁴ which the editors describe as probably late Geometric, but possibly Boeotian of a later date. Certainly this bowl could belong to the seventh century. Again, the circle of

dots round the central spout of the rhyton, and the rectangular decoration on the bulwarks, could be Boeotian—in many Boeotian cups and bowls a line of dots is found round the rim; but more than this cannot be said.

A further substantiation of this tentative assignment of the Boston ship-rhyton to a Boeotian origin of around 600 B.C. is perhaps provided by a consideration of other plastic vases. M. I. Maximova¹⁵ assigns a number of plastic vases (rams, boars, sphinxes, etc.) with geometric decoration to Boeotian manufacture of the sixth century; but some of these¹⁶ must be somewhat earlier than this. Maximova maintained that these Boeotian plastic vases were imitated from Chalcidian, East Greek, and Corinthian models—but certainly not from Attic; for, she asserts,¹⁷ except for a sub-Geometric three-legged askos in the form of a bird, from the Ceramicus,¹⁸ no Attic plastic vases proper are known from the Geometric, orientizing, or early archaic periods. Of course if one sub-Geometric Attic plastic vase is known many more may have been made; but the rarity of such vases is an additional argument against an Attic origin for the Boston rhyton.

In addition to the problem of date and place of manufacture there are special problems concerned with the actual construction of the rhyton. First, is there any significance in the fact that it stands upon legs, resembling a monstrous animal with bristling mane almost as much as a ship? Perhaps the artist was uncertain, at some stage of the modelling process, whether to make an animal or a ship; perhaps his greater experience in making the far commoner animal vases inclined him to extend to the whole shape of the ship the animal-imitation which was conventionally applied only to the ram. The use of three legs instead of the more usual and certainly more stable four may be connected with the artist's apprehension of an ambiguity: the use of four legs would make the resemblance to an animal much more striking even than it is, and would further interfere with what must have been, in the final stages at any rate, the artist's primary intention of making a ship-rhyton. Of course three legs are easier to make than four, and provide adequate if not complete stability: the explanation may be as simple as this. Three-legged plastic vases in the shape of birds are by no means uncommon and were made especially in Cyprus, from middle and late Bronze Age askoi¹⁹ to middle Iron Age askoi.²⁰ Three-legged animals, however, are rare indeed: I only know of the archaic East Greek rhyton in the form of a horse, in the British Museum.²¹ Undoubtedly the use of three legs in plastic vases was in origin a matter of simplicity and function; it continues the motive of the earliest tripod vessels, like the early and middle Bronze Age bulbous tripod cups from Cyprus.²² Thus three-legged

birds do not seem unusual and even a three-legged horse can be accepted, since the legs are not necessarily connected with the plastic motive of the vase. A ship-rhyton would admittedly look more realistic if it stood on no legs at all; if it has to have legs, then three have advantages over four.²³

The second problem concerns a shallow ridge which runs fore and aft along the centre of the "deck," from each side of the base of the filling-spout; this ridge can just be distinguished on pl. 34, to the right of the spout. Does the ridge represent an actual feature of a contemporary warship, or is it a constructional device of the potter? The former is most unlikely, for the central part of the vase can scarcely be considered realistic in its imitation of a ship: most of it is taken up with the large spout, and in any case the curved upper part which has been described as the "deck" cannot represent current nautical practice. It is most improbable that any warships of the seventh or sixth centuries were fully decked (that this is a warship, or at any event not a long-distance merchant vessel, is shown by the presence of the ram): longships, chiefly penteconters and triaconters, certainly were not, as can be seen from the many artistic representations of this type of ship; and Thucydides tells us (1.14.3) that the Athenian triremes built just before Salamis "were not yet decked throughout"—that is, they did not have watertight decks, but had fore-and-aft platforms or gangways which did not cover the whole width of the ship. Admittedly small boats may have had watertight decks from a quite early period;²⁴ but the rhyton, in spite of its shortness, clearly represents a ship and not a small boat. Perhaps then the ridge is the result of some technique of the potter. Conceivably a rod with a curved handle was inserted into the central hole in the "deck," when the filling-spout was being added, and pushed up against the underside of the "deck," first forward and then aft, to prevent it from sagging during the attachment of the spout. But the surface of the ridge is not quite smooth, as the rest of the "deck" is, which suggests that the ridge may have been pinched up with the fingers: in short, no entirely satisfactory explanation presents itself.

The third problem is equally difficult. On the outer side of the port fore bulwark is a painted appliqué strip of clay, rounded and almost vertical, which seems to represent a man's leg. No corresponding strip was ever applied to the other bulwark, but the surface of the clay is broken on the inner edge of the rim of that bulwark, where there is also a blob of black paint: these details are again discernible on pl. 34. On the "deck" between the bulwarks the clay is raised and broken, showing that some sort of support or appendage has been broken off. Smith in the Forman Sale Catalogue explained as follows: "over the prow,

a similar figure (sc. to the steersman), detachable, was formerly placed, but is now wanting." This hypothesis of a detachable figure was accepted by Robinson and Fairbanks; but it is surely impossible that the figure was detachable, for its one remaining leg is firmly attached to the side of the ship and must always have been so attached. The figure has just been broken off and lost. Its original posture is not clear: evidently it did not sit astride both bulwarks, since there is no trace of the other leg in a corresponding position to the remaining one. Possibly it was sitting astride the port bulwark, facing forward; in this case the broken part between the bulwarks was the base for the other foot; the right hand may have rested on top of the starboard bulwark, where the surface is damaged, and the left hand may have grasped the upper, missing, part of the high stempiece. This figure, smaller perhaps than that of the man in the stern, must still have formed a considerable excrescence, and it is not surprising that it and the top of the stem should have been broken. The posture suggested for this second figure must remain hypothetical (as indeed must the very existence of such a figure, although it is difficult to imagine what other than a human leg the appliqué strip could be meant to represent); it does not entirely account for the extent of the broken part between the bulwarks, which looks as though it supported more than a single thin leg; perhaps there was some kind of thwart.

The Boston ship-rhyton presents more than its fair share of difficulties. It must have been unusual even in its own day;²⁵ models of ships are known in Greece from the Middle Minoan period onward, but vases in the shape of a ship are most uncommon. There is however a roughly contemporary Etruscan orientaling askos from Tarquinia²⁶ which probably represents a ram-less ship with two figures; it has a high bow and stern, the former being shaped like an animal's head, the latter forming a wide spout. There is a curved handle in the centre, on top of the vase, at each side of which stands a figure of a man with both arms stretched out to touch the middle part of the handle. This suggests men at work with halyards on each side of the mast, as in e.g. the ivory relief of a ship from the sanctuary of Artemis Orthia, in Sparta, of the second half of the seventh century.²⁷ The Tarquinia askos, however, is a much cruder and less realistic representation than the Boston rhyton, and is of small value as a parallel: for practical purposes the Boston rhyton may be called unique.²⁸

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²⁵ AE 1917, 209; BSA 35 (1934-5) 173 and pl. 40b; BSA 44 (1949) 120, fig. 7.

²⁶ A. Köster, *Das antike Seewesen* (Berlin 1923) pl. 33; BSA 44 (1949) 138, fig. 10; etc.

²⁷ Köster, *op. cit.* pl. 35; Pfuhl, *MuZ* III, no. 65, with other references.

²⁸ Castellani collection no. 442; Mingazzini, *Vasi della Collezione Castellani* 212-5; Pfuhl, *MuZ* III, no. 233.

²⁹ Robinson, *loc. cit.*, compared the rhyton with the ship on a red-figure amphora in the British Museum depicting Odysseus and the Sirens (*Catalogue of Vases* III, E440); he was able to do this only because the depiction of details of ships, with the exception of the rowing arrangements, did not change greatly from the mid-sixth to the mid-fifth century. Of course our ship is nothing like a penteconter or a triaconter in its proportions, and among black-figure ships is closer to the ship of Dionysus on a kylix by Exekias in Munich, inv. 2044; *FR* pl. 42; Pfuhl, *MuZ* III, no. 231. Its short, squat, build is dictated partly by its function as a container.

³⁰ Described by A. D. and P. N. Ure, *AA* 48 (1933) 1-6.

³¹ CVA, Denmark 2, Copenhagen 2, pl. 68, 2a-b.

³² CVA, U.S.A. 5, California 1, pl. 3, 8.

³³ P. N. Ure, *Sixth and Fifth Century Pottery from Rhitsona* pl. vii, no. 102.34.

³⁴ The guilloche, or cable-pattern, is a variation (one might say a sophistication) of the meander. In a loose or degenerate form it becomes broken, i.e. the curvilinear reverse sigma elements are detached from each other. The rectilinear sigmatoid pattern, such as is found on the upper surface or "deck" of the rhyton, is also a degeneration of the meander. Such forms are not found on Geometric pottery proper, or only occasionally on very late and careless examples.

³⁵ CVA, Deutschland 2, Berlin 1, pl. 38, 2.

³⁶ BSA 35 (1934-5) pls. 41, 42a.

³⁷ BMFA inv. 86. 629-30 (92-3); Fairbanks, *op. cit.* no. 330.4.

³⁸ CVA, U.S.A. 4, Robinson Coll. 1, pl. 11, 1a-b.

³⁹ *Les Vases Plastiques dans l'Antiquité* (Paris 1927) I, 192-8.

⁴⁰ E.g. her nos. 169 and 170 (vol. II, pls. XLV and XLVI)—a ram-rhyton in the Berlin Antiquarium, inv. 3336, and a sphinx-rhyton in the Louvre, inv. 376.

⁴¹ *Op. cit.* I, 85-6 and 198.

⁴² Athens, NM 381; Collignon-Couve, pl. xvi; Maximova, *op. cit.* II, pl. xi, no. 43.

⁴³ CVA, Belgium 1, Brussels 1, IIc, pl. 1, 4; France 13, Sèvres, pl. 9, nos. 11 and 7; Great Britain 1, Brit. Mus. 1, pl. 5, nos. 2, 11, 26.

⁴⁴ CVA, Great Britain 2, Brit. Mus. 2, pl. 9, nos. 6, 9, 10. Cyprus was the earliest centre to produce large numbers of plastic vases, and the manufacture of such vases continued longer there than is usually thought. Other Cypriot plastic askoi of the Iron Age: CVA, Denmark 1, Copenhagen 1, pl. 25, nos. 1 and 2; Great Britain 2, Brit. Mus. 2, pl. 9, nos. 2, 3, 4, 5, 7, 8.

⁴⁵ BM G583; Maximova, *op. cit.* II, pl. 20, no. 82.

⁴⁶ Cf. e.g. CVA, Great Britain 1, Brit. Mus. 1, pl. 1, nos. 1 and 4.

⁴⁷ It has been suggested to me that the legs might be a development of the idea of a swift ship running over the waves. This seems most unlikely; ships are thought of as winged (e.g. *Od.* 11.125: ἀπτερά, τὰ τε πτερὰ νηὶ πέλονται), but when verbs for running are applied to ships

(as at Theognis 856: ναῦς παρά γῆν ἰδραμεν) the metaphor seems to be a dead one. In any event the idea of speed seems to be entirely foreign to our squat and stolid ship; and why only three legs in this case?

²⁴ See my remarks in *BSA* 44 (1949) n. 58 on p. 139; and, for the whole question of decks in early Greek ships, 128-9, 138-9.

²⁵ There is one literary reference, much later in date, to a rhyton in the form of a trireme: Epinicus (a writer of comedies, of the second century B.C.), quoted by Athenaeus, 497b (Kock, *CAF* III, p. 331), mentioned three outsize rhyta from which one of the characters had to drink as a penalty. One of these rhyta is in the form of an elephant, another in the form of a trireme. These are obviously fantastic vessels of which the shape is intended to suggest vast size; they are probably imaginary.

²⁶ Montelius, *La Civilisation Primitive en Italie depuis l'Introduction des Métaux* II.2, pl. 284, 1; *AA* (1942) 449, fig. 14.

²⁷ *Artemis Orthia*, 214 and pls. cix and cx; Köster, *op. cit.* fig. 20. Cf. *BSA* 44 (1949) 121.

²⁸ I must record my gratitude for the helpfulness of Miss Edith Marshall, of the Department of Classical Art in the Museum of Fine Arts, Boston, in making available to me the facilities of the Museum; and of Professor George Hanfmann of Harvard University.

THE MECHANICAL ENGRAVING OF CIRCULAR LETTERS

A. E. RAUBITSCHKE, Princeton University

PLATES 35-37

ANDREAS RUMPF *sexagenario*

Κύκλος τις ὡς σημεῖον ἐκμετρούμενος.
Οὗτος δ' ἔχει σημεῖον ἐν μέσῳ σαφές.

Euripides, *Theseus*, frag. 382 (N.)

ONE must distinguish between the early instances of omikron with central dot in which the whole letter was cut with a chisel and those round letters in which the central dot is due to an instrument used for the cutting of the circle. The simple incision-compass was employed by the early archaic sculptors (Prinias) and perhaps even by the painters of circles on Geometric and Cypriote vases. Among Attic inscriptions, the cutting compass was used, but by no means frequently, from the second quarter of the sixth century to the beginning of the fifth. Early examples are the dedications of Rhombos and of the Alcmeonids, and the best is a dedication to Aphrodite: pl. 35.A.¹ In some cases, the letter was engraved only with the compass, but generally the stone cutter went over the slightly incised line with the chisel. On the marble basin dedicated by Polyxenus one of the mechanically engraved circles was too large and is

therefore still visible on the stone while the others disappeared when the engraver deepened them with the chisel: pl. 35.B.¹ Thus the mechanically cut line left no trace except for the central dot which could be and sometimes was erased.

In other cases, the instrument used was a trident drill the two legs of which were twisted around a slightly longer central spike. This drill was capable of cutting deep grooves, and its use is also attested from early archaic sculpture (Corcyra). Among inscriptions, the earliest examples come from the Peloponnesian area and belong to the first half of the sixth century.² It may have been in imitation of these mechanically cut circles with strongly pronounced central dots that the chisel cut, dotted omikron was produced. Among Attic inscriptions, the trident drill was used, but rarely, from the middle of the sixth century to the beginning of the fifth.³ A significant late example from the middle of the fifth century is the Argive funeral monument, probably cut by an Argive engraver (*SEG* 10.407). The radii of the circles are always identical within one inscription, but the engraver sometimes went over the mechanically cut grooves with a chisel to make them conform with the rest of the inscription, and in this way he created certain slight differences between the circles.

The most interesting and hitherto unrecognized tool for cutting circular letters mechanically is the tubular drill, an instrument favored during the Minoan period.⁴ It consisted of a hollow cylinder which was rapidly turned, presumably around a tightly fitting wooden core; the cutting was done by sand or emery, and the resulting circles were normally much broader than letters cut by the chisel. If the engraver did not hold the drill, i.e., the wooden core, firmly he produced in addition to the proper letter one or two other circles which were off center. The engraver of the first Marathon epigram and of the Hekatompedon inscriptions used this type of drill and made these mistakes (*SEG* 10.404 and 4/5—pl. 36, A, B, and C); thus the perfect circles of this famous stone cutter were mechanically engraved (*AJA* 39 [1935] 515-516: "freehand"; see also R. Harder, *JDAI* 58 [1943] 124). The use of the tubular drill, an instrument probably employed by the late archaic sculptor for undercut folds, is not known from inscriptions of the period before 490 B.C., but there are a number of significant examples from the fifth century, especially from the first half. Here should be mentioned the famous stele from the city Eleusinium belonging to ca. 470 B.C. and two other "religious" inscriptions of the same period. Two public funeral lists, one from the first and one from the third quarter of the fifth century also show the use of this drill. Finally, the round letters of the "Amphictyonic" decree of 458 B.C. were engraved with the tubular drill: pl. 37.⁵

It appears that the cutting compass, the trident drill, and the tubular drill were used by stone cutters in Athens for the mechanical cutting of circular letters from the early sixth century to the middle of the fifth. Many of these stone cutters worked in the studios of artists, and they were often sculptors themselves. It may seem that the engravers of the Attic decrees which were published in ever increasing numbers from the fifties of the fifth century on did not employ mechanical aids for the cutting of circular letters, certainly not the trident drill or the tubular drill. Since it is assumed, however, that the carefully made Attic inscriptions were first sketched on the stone, perhaps in charcoal, it is quite possible that the Attic engravers used the compass for the sketching of the circular letters; this use left, however, no trace on the stone after the sketch had been washed off.

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¹ See *Dedications from the Athenian Akropolis* (abbreviated as *DAA*), ed. by A. E. Raubitschek and L. H. Jeffery (Cambridge, Mass., 1949): Rhombos = *DDA* 59; Alcemeonids = *DDA* 317 (R. Harder, *JDAI* 58 [1943] 113 and 117, n. 3); Aphrodite = *DDA* 296; Polyxenus = *DDA* 342.

² Argos: Roehl, *Imagines*³ 38.8.

Cleonae: Roehl, *Imagines*³ 45.12.

Corcyra: Rodenwaldt, *Aldor. Bildwerke in Korfu* pl. 1.

Corinth: *AJA* 7 (1903) 155, fig. 4 (*AJA* 46 [1942] 69-72); *AM* 22 (1897) pl. 9 (cf. *IG* I² 927).

Nemea: *AJA* 31 (1927) 433, fig. 10.

Phlius: *Hesperia* 5 (1936) 236, figs. 4-5 (*ibid.* 10 [1941] 371-372).

³ The earliest example is a victor's dedication from ca. 550 B.C. (*DAA* 61), and the same instrument was used on an archaic altar (*DAA* 331), on a public monument of the early fifth century (*DAA* 152), and on a recently discovered archaic cult document, illustrated in *Hesperia* 18 (1949) pl. 45.1.

⁴ See S. Casson, *Technique of Early Greek Sculpture* (1933) 209-215; for discussions of the incision compass and the trident drill, see 69-70 and 118-121.

⁵ Eleusinian stele: *SEG* 10.6; use of drill mentioned in *Hesperia* 14 (1945) 69-70, n. 24.

"Religious" inscriptions: *IG* I² 188 and 840.

Funeral lists: *IG* I² 848 and *Hesperia* 15 (1949) 19, where the use of the drill is noticed.

"Amphictyonic" decree: *SEG* 10.18; see also B. D. Meritt, *AJP* 69 (1948) 312-314, and Ad. Wilhelm, *Mnemosyne* 2 (1949) 286-293.

ROMAN PANTHER TRIPODS*

DOROTHY KENT HILL, The Walters Art Gallery

PLATES 38-39

THERE exist at least six Roman folding tripods, complete or fragmentary, distinguished by a striking decorative element: a loop handle surmounted by a panther's head on a long, arching neck. This decorative unit is used with such consistency of detail that the six tripods must be closely related to each other. Mechanically, these six form a subdivision of the large group of collapsible tripods with straight, rectangular lower legs on which there move slides attached to movable braces, and which support their crowning members, basins or braziers, on hooks.

The tripod reconstructed on plate 38 consists of parts of two which by coincidence happened to belong to The Walters Art Gallery.¹ For exhibition purposes they have been combined into one tripod, though piece *d* really belongs apart from the others. Considerable restoration has been necessary; the dimensions for the restored proportions were calculated from a tripod found at Ballana, Nubia, and now in the museum in Cairo.² Of the original portions, all except *d* came from the Massarenti Collection in Rome. Our *a*, *b* and *c* are listed as one item in the catalogue of that collection.³ *a* is an animal's foot on an hexagonal base; *b* is another foot attached to a rectangular leg which is preserved to the height of .24 m., with a rectangular slide moving on the leg and about .16 m. of each of two braces, attached to the slide by hinged joints and set at an angle of sixty degrees to each other;⁴ while *c* is a piece .67 m. tall, consisting of a foot, complete with a square leg, slide, hinged joints with no braces preserved, a loop handle decorated with acanthus and other motifs, and a panther's head and neck. (Parts of the braces of *b* are concealed in the photograph by modern strips applied for strength.)

The Massarenti Collection also included three hooks, *e*, *f* and *g*, which were supposed to be wall brackets for a bronze tablet and had been so used in modern times.⁵ They are identical with hooks at the tops of the legs of similar tripods. Like the hooks on some others, these imitate, by engraving on the inner face, the nail and first joint of the human finger.⁶ The hooks are mentioned in the report on excavations conducted in 1882 at a house at Bolsena, called the house of Laberius Gallus because his name occurs in the wall tablet.⁷ The fingers are described in the *Annali* for 1882, p. 165, while in the *Notizie* for the same year a tripod is mentioned (316). It seems certain that fingers and other fragments all belong to the same tripod, and accordingly the hooks have been included in the restored tripod.

d, the remaining fragment, was bought at auction

from the Lambros Collection of Athens, sold in Paris in 1912.⁸ Plate 39 shows this fragment at the right, with *c* from the Massarenti Collection at the left. In design the two fragments are almost identical. The lower part of the handle is decorated with long tongues, above which are incised crossed lines forming squares in one case, shallow rectangles in the other. Half way up the handle there is a kantharos with vine sprays emerging. Above flutings and plastically rendered acanthus leaves protrude the long neck and fierce head of a panther, easily distinguishable from a lion not only by the shape of head but also by the spotted skin. The spots were produced by a punch used at random. However, there is a decided difference between the two handles in style, especially in the treatment of the heads. The one at the left is worked with straight strokes, while that on the right is smooth and without conspicuous signs of tooling. The more angular style is often taken to be indicative of late date and of provincial origin, while the smooth style is more truly "Classical." Nevertheless, I think the difference may be due in large part to the personality of the finisher, and, because of the startling unity of design, I am inclined to date the two handles close together. Indeed, it is for the more angular fragment that we have a sort of *terminus ante quem* provided by the date of the destruction of the house at Bolsena. The destruction must have occurred about the end of the third century A.D., to judge from the coins found in the ashes.

The other four panther tripods and fragments are the following: in the museum at Syracuse a fragment consisting of a handle and a panther's head, together with the sculptural groups from the tops of the legs, each a centaur holding a cornucopia; at Lyons, a handle with a panther;⁹ in the museum at Douai, a complete tripod found at Bavai;¹⁰ and the tripod from Ballana which was mentioned above. The Ballana example has two straight, handleless legs and a third with handle. The animal's head, surely not a lion but a panther, is small in proportion to the length of neck, and at least one punched spot is visible. Terminating the legs at the top are three beautiful little busts, either Bacchae or, as I think, young Dionysos himself. His bust is draped with a skin and his hair is bound with a heavy garland of leaves and berries (or grapes) and at the front of his head there is a round flower. The faces are beautifully worked. I have examined them carefully and am inclined to date them no later than the height of the Roman Empire, since there is no trace of provincialism and no stylistic characteristic which is positively late. They have the smooth, developed modelling which we describe as "Classical" and carry with them no suggestion that such a style is on the wane. The implication in Emery's publication is that the tripod is considerably later

than this. The royal tombs of Qustul and Ballana are dated by inscriptional evidence to a period extending from the middle of the fifth century A.D. through the sixth, and the author states that all objects except those which are obvious survivals belong to this period.¹¹ Of the metalware he remarks particularly that the resemblance to Pompeian work is noticeable and that many objects show only a slight development from their equivalents of the Pompeian era. Finally, he remarks of a second tripod found at Ballana that the goats and griffins which take the places of the panthers and human busts are of later type, being motifs which triumphed in the period of Christian art.¹² My own belief is that both the Ballana tripods are among the "obvious survivals" at Ballana, that they were antiques when buried, and that they date from the high period of the Empire, probably the third century A.D.

In contrast to Emery's very high dating of the tripods from Ballana, one should mention the rather general tendency to describe fragments of tripods of the same general class as "Pompeian."¹³ The Dionysiac busts as crowning members are most frequently so described. Actually, no complete or incomplete tripod of the same mechanical construction as the panther tripods has been found in the excavations at Pompeii or Herculaneum. There is only a tripod from Nocera, sometimes mistakenly called Pompeian.¹⁴ One other, which lacks the hook device at the top, has been called Pompeian, but not by careful and competent scholars.¹⁵ In contrast to the tripods we have discussed, all with straight lower legs on which move slides attached to braces, and all with hooks for supporting the crowning basins or bowls, the typical tripod from Pompeii is an elaborate, graceful affair with zoomorphic details. Inevitably it has an animal's leg which emerges from the foot and develops until it suggests a breast, above which the animal's head appears. On such a leg it would be impossible to have a slide for the braces, and a straight rod is always secured inside to perform this function.

Three authors have written extensively about folding tables and tripods: Schwendemann, Willeumier, and Erdelyi.¹⁶ The last named dealt exclusively with straight-legged tripods, and she arrived at a system of dating which seems plausible in the light of what available information there is on the six panther tripods (of which she knew one example, the tripod from Bavai). She derives all the straight-legged folding tripods from those of the S form, and sees them forming a series stretching from the second century of our era to the fourth with the last position in the group occupied by the silver tripod in Budapest, elaborately decorated, showing by its style that it is later than the panther tripods, as I think.¹⁷

It is not necessary to list here all the known col-

lapsible tripods, for they are listed and illustrated in the above mentioned articles. Of all those with the same mechanism—braces attached to slides that move on the lower legs and hooks at the top of the legs—a few have absolutely straight legs, for example one from Lyaud in the Louvre.¹⁸ A variant type has straight legs with an extension device, such as the example from Castra Vetera.¹⁹ Nearer to the panther tripods in form are the several tripods with handles at half height and ornamental figures; among the more important are the well preserved one from Industria,²⁰ and the extremely fragmentary one from Tigava in North Africa, the chief subject of Willeumier's article. Both of these assuredly belong in the second century of our era. Much closer to our panther tripods is the four-legged table from Sackrau which Willers and Erdelyi agree in dating in the third century after Christ.²¹ The construction of the whole object is necessarily different from that of a tripod. The subject matter, too, is different; the spotted panther turns his head to look at Dionysos who stands, grapes in hand and spotted nebris about his shoulder, backed against the table leg. Yet in style and decorative element, if one may judge from the rather inadequate reproduction, this table comes nearest to our panther tripods. The stylistic evidence therefore confirms the slight amount of excavational evidence which I had assembled for the Baltimore panther tripod. Pending further information I would date the group of six collapsible panther tripods and fragments—two in Baltimore, one in Syracuse, one in Lyons, one in Douai, and one in Cairo—in the third century A.D., and assume that the Ballana tripods were antiques at the time of their burial.

April 1951

*Paper presented at the fifty-second General Meeting of the Archaeological Institute of America, December 1950.

¹Walters Art Gallery, nos. 54.894 and 54.887. Height of the tripod as reconstructed, 1 m. Height of handle, lower acanthus to top of panther's head, .26 m.

²W. Emery, *The Royal Tombs of Ballana and Qustul* ("Service des antiquités de l'Égypte. Mission archéologique de Nubie, 1929-1934") 165, 350 f. no. 755 with fig. 113, pl. 90, B.

³E. Van Esbrouck and others, *Catalogue du Musée au Palais Accoramboni* 2 (Rome 1897) p. 10, no. 17.

⁴This leg is rectangular, not square. It is set with a broad face above the foot, not a corner. It probably was without handle. Such variation is common in Roman work, as witness the Sackrau table discussed below and the Ballana panther tripod: Emery, *loc. cit.* Possibly our tripod had two plain and one decorated leg; the damaged top of the foot above which we have placed the Lambros fragment seems to have been broader than it is deep.

⁵CIL XI, 2702; Van Esbrouck, *op. cit.* 8 ff., no. 14; now Walters Art Gallery, no. 54.176.

⁶For finger so used, see *Archaeologiai Ertesito* 45 (1931) 292.

⁷E. Stevenson, *Annist* 1882, 157-181, pl. S; *NS* 1882, 262-265, 315-317, 338 (*Memorie* 380 ff., 450 f., 505).

⁸Sale Catalogue, Lambros and Dattari Collection (Paris, Hôtel Drouot, June 17-19, 1912) 31, no. 263. Walters Art Gallery, no. 54.887.

⁹S. Reinach, *Répertoire de la statuaire grecque et romaine* 4, p. 479, 1.

¹⁰*Bulletin de l'Institut Archéologique Liégeois* 32 (1902), pl. B after p. 342, fig. 6.

¹¹Emery, *op. cit.* 161.

¹²*Ibid.* 165, 351, no. 756.

¹³Andren, *OpusArch* 5 (1948) 36, no. 76, pl. 19; Bieber, *Die antiken Skulpturen und Bronzen in Cassel* 79.

¹⁴Naples, no. 73951. Willeumier, *MéRome* 45 (1928) p. 138, no. 5. According to him, the source is Nocera. The reference to Pompeii is in Bieber, *loc. cit.*

¹⁵Naples, no. 73952. Willeumier, *op. cit.* 138, no. 4. According to him, the source is unknown. The reference to Pompeii and to the date of excavation (August 17, 1866) is in a catalogue of reproductions, *Catalogue illustré de Sab. De Angelis & fils* (Naples 1900) 115. For a photograph which is clearer but omits the basin, see Tarbell, *Catalogue of Bronzes, reproduced from Originals in the National Museum in Naples* (Field Museum of Natural History. Publication 130. Anthropological Series. Vol. 7, no. 3) (Chicago 1909) pl. 46, fig. 29.

¹⁶K. Schwendemann, *JDAI* 36 (1921) 107 ff.; Willeumier, *MéRome* 45 (1928) 128-149; Gizella Erdelyi, *Archaeologiai Ertesito* 45 (1931) 1 ff. See also, Couitil, *Département d'Évreux* (Paris, 1921) 190, fig. 106, nos. 69, 70 and 185, fig. 102, no. 12 and 186, no. XII.

¹⁷Erdelyi gives credit for her chronological system to Schwendemann. As I interpret him, he traces a development in the opposite direction, a development from straight to S-shaped legs; this is imagined for types, though not illustrated by the extant specimens. The chronology which I suggested at the General Meeting of the Archaeological Institute of America in Toronto agrees essentially with Erdelyi, whose work I had not yet seen. However, if I understand her correctly, she dates the Bavai tripod earlier than I do.

¹⁸Willeumier, *op. cit.* 140, no. 14; De Ridder, *Bronzes antiques du Louvre* 2 (1915) pp. 99 ff., no. 2577, pl. 93. No. 9 according to Willeumier and no. 2 of Schwendemann, a tripod in the Capitoline, is probably very similar; see the additional description in Platner and Bunsen, *Beschreibung der Stadt Rom III* I (1837) p. 184, no. 39.

¹⁹Willeumier, *op. cit.* 141, no. 18, which I think is the same as his no. 17; P. Houben and F. Fiedler, *Denkmaeler von Castra Vetera und Colonia Traiana in Ph. Houben's Antiquarium zu Xanten* (Xanthé 1839) 58 f., pl. 12; Schwendemann, *op. cit.* 108 f., no. 3 and Beilage opp. p. 98, fig. 17; C. H. Smith and C. A. Hutton, *Catalogue of the Antiquities in the Collection of the late Wyndham Francis Cook Esquire* 2 (London 1908) p. 121 no. 74, pl. 44; Guhl and Koner, *Leben der Griechen und Römer* (1893) 688, fig. 902 (implies that there are similar tripods from Pompeii). For a full description of the similar tripod

in the Conservatori in Rome see Schwendemann, *op. cit.* 108 f., no. 1. A tripod found at Borsu (Belgium) was supposed to have had a panther handle, but in further excavations parts were found which proved that it had had three straight legs. *BulLiège* 32 (1902) 335-348, pls. A, fig. 6 and B, fig. 2; *ibid.* 37 (1907) 321-326, pl. 9 and drawing on p. 326. Erdelyi notes the incorrect restoration.

²⁰ Found in 1745. *Atti della Società di Archeologia e Belle Arti per la Provincia di Torino* 3 (1880) p. 101, pl. 16; P. Barucchi, *Memorie, R. Accademia delle Scienze di Torino* 33 (1829) 138-150 and pl. opp. p. 138; *Giornale scientifico, letterario e delle arti (Società di Torino)* 1, 4, (1789) 133 f.; Reinach, *op. cit.* 2, p. 388, 8 and 2, p. 705, 3 and 2, p. 62, 11. The inscription which is supposed to have been found nearby is now *CIL* V³, 7468.

²¹ Grempler, *Der Fund von Sackrau* 1 (1887) p. 5, pl. 3; Willers, *Untersuchungen über die Römische Bronzindustrie von Capua und Niedergermanien* (1907) 96 f., fig. 56; Reinach, *op. cit.* 3, p. 34, 5; Willeumier, *op. cit.* 143 f., no. 28. See Grempler, *Der II und III Fund von Sackrau* (1888) 11 f., pl. 7, for the coin of Claudius Gothicus which Willers erroneously states was found in a grave with the table.

²² Attention should be drawn to a tripod fragment sold at auction in Munich in 1910: *Kunstbesitz eines bekannten norddeutschen Sammlers* IV, pl. 8, no. 656. Above a very small panther head is a platform on which a tiny figure of Victory stands. I believe this tripod to be slightly earlier than the six panther tripods.

Since writing the above, I have seen another panther tripod which is in the Cabinet des Médailles of the Bibliothèque Nationale, Paris. It is rather small and is completely covered with a plating of sheet silver. In other respects it is identical with those described above: one handle with panther at top and kantharos ornament on the front, busts at the tops of the legs above hooks and; on the head, flower and double leaves.

THE SENATORIAL BUT NOT IMPERIAL RELATIVES OF CALPURNIA AR[RIA]

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The Athenian inscription *IG* II² 3548a reads in Wilhelm's masterly reconstruction¹ as follows:

Τιβ[έρ]ιον Κλα[ύδ]ιον [Καλλ]ί
κρα[τί]δου νιό[υ] Κυρε[νί]α
Οινόφιλον Τ[ρι]κορύσειον
5 ιεροφαντήσαντα 'Αρ[ρία]
Τορκ[ο]νάτου θ[υ]γάτηρ
Καλπ[ου]ρνια, Βελ[λ]έλκου
Τηβα[ν]ία[ρου] γυνή, τὸν
[ποιή]την πατέρα.

Wilhelm pointed out that the hierophant was already known from *IG* II² 3546, which gave the man's previous career both at Athens and in the imperial

service, for he had once served as *praefectus fabrum* and as *praefectus cohortis II Hispanorum*. Wilhelm, furthermore, said the essential concerning the ancient Athenian family to which the hierophant belonged, and he (and Groag) identified Bellicus Tebanianus correctly. Since *IG* II² 3546, erected in the hierophant's lifetime,² was dated by a priestess of Athena who held office under Domitian and Nerva, *IG* II² 3548a, which was erected after the death or, conceivably, abdication of the hierophant, probably dates from the last quarter of the first century. Hierophants were old men and seldom lasted long.

Less satisfactorily, Wilhelm identified the dedicator Calpurnia Ar[ria] as a daughter of D. Junius Silanus Torquatus, whose connection with Athens is attested by *IG* II² 4180. Calpurnia would then have been a descendant of Augustus.

This the writer, despite his great respect for Wilhelm, does not believe. Our inscription suggests that the name of Calpurnia's father was either Arrius Torquatus or Calpurnius Torquatus. Since her husband's descendants unlike her husband's father do have names containing not only the element Torquatus but also the element Calpurnius, it emerges that her father's name was abbreviated as Calpurnius Torquatus. This points to the family of Nonius Asprenas Calpurnius, to whom Augustus gave the cognomen Torquatus. Suetonius, *Divus Augustus*, 43 (ed. Ihm): *Sed et Troiae lusum edidit frequentissime maiorum minorumque puerorum, prisci decorique moris existimans, clarae stirpis indolem sic notescere. In hoc ludicro Nonium Asprenatem lapsu debilitatum aureo torque donavit passusque est ipsum posterosque Torquati ferre cognomen.* That also this family had connections with Athens we know from *IG* II² 4154. Groag has a more complete stemma of the Nonii in his article on this man, *RE* 17 (1936) 870 s.v. "Nonius 16." In Figure 1 I have copied the section representing the descendants of the first Nonius Asprenas Calpurnius Torquatus in order to show the nomenclature, and I have added Calpurnia Ar[ria] and her husband's family.³ In the name of the first Nonius Asprenas Calpurnius Torquatus and in those of his descendants the original gentilicium Nonius was often omitted and replaced by the secondary gentilicium Calpurnius, which emphasized an illustrious branch of their ancestry and distinguished them from other Nonii.

Wilhelm asked whether a relation existed between Arria Calpurnia and an Athenian named Arria Athenion who appears in Athenian inscriptions of the Hadrianic Period. "Wird 'Arria' 'Aθήνιον' nicht vielleicht deren Tochter sein?" Groag⁴ passed over this last suggestion in perhaps significant silence, but Raubitschek⁵ asserted, "Oinophilos hat, bald nach 64, die Tochter des D. Iunius M. Silani f. Torquatus, eines Urenkels des Kaisers Augustus, Arria, adoptiert;

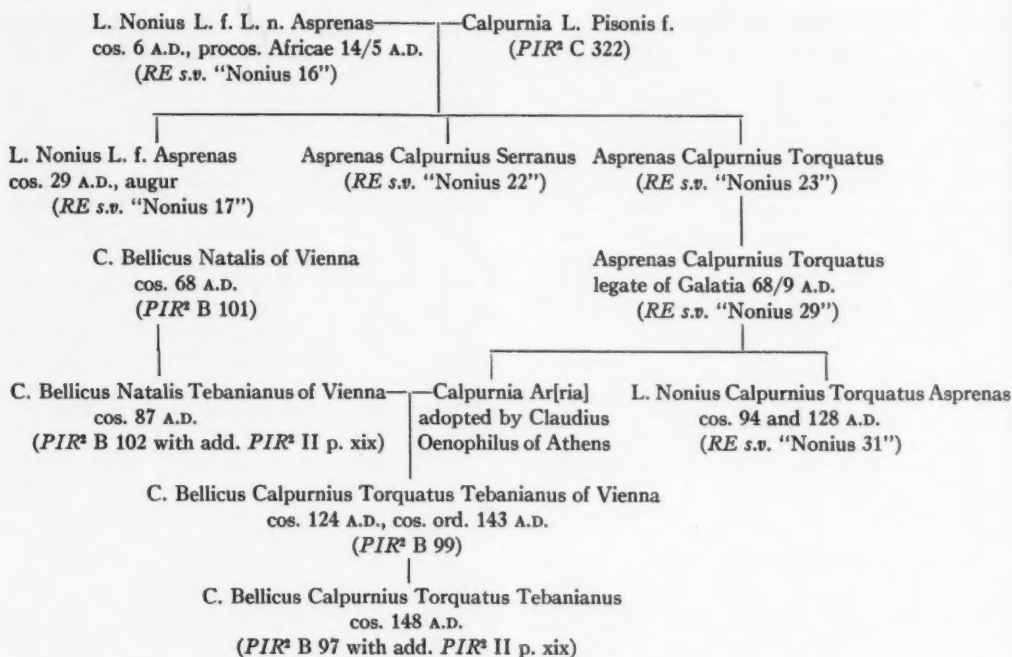


FIG. 1. THE RELATIVES OF CALPURNIA AR[RIA]

diese heiratete später den C. Bellicus Natalis Tebanianus . . . , mit dem sie eine Tochter Arria Athenion hatte." Surely Arria Athenion's connection, though possible, remains undemonstrable; sooner than a Westerner whose *nomen* "Bellica" has been omitted, her name in fact suggests an Easterner with the *nomen* "Arria." But, at least, she was not descended from Augustus.

Nor is it true that Calpurnia married Bellicus Tebanianus *after* her adoption. Although she accepted the adoption by Claudius Oenophilus, she did not change her name to Claudia. Here in the market place of Athens the continued use of her old name shows that she never passed into the *manus* of Claudius Oenophilus. The explanation, I think, is that Claudius Oenophilus was no longer alive when the adoption took place and that Calpurnia Ar[ria], descendant of many consuls and member of a family which had been elevated to the patriciate, could be happy about accepting an adoption which strengthened her position as heiress without compromising her social position. In other words, it was a case of *adoptio testamentaria*⁶ for the purpose of instituting an heir,⁷ in a situation where two social conventions and two systems of law were involved, Roman law and the law of Athens, a *civitas libera* with pride and prestige.

March 1950

¹ Originally published in *Hesperia* 3 (1934) 72 f., No. 70 by B. D. Merritt, who accurately assigned the inscription to the first century after Christ on the basis of the lettering alone, the text was somewhat improved by J. Kirchner, *IG II²* (1935) 3548a, but it was completely and convincingly reconstructed by A. Wilhelm, "Eine jüngst bei den amerikanischen Ausgrabungen in Athen gefundene Ehreninschrift," *Anzeiger d. Akad. d. Wiss. in Wien, philos.-hist. Klasse*, 72 (1935) 83-90. Wilhelm had discussed certain points with Groag. Since Wilhelm's article the inscription has been treated by E. Groag, *PIR² II* (1936) under A 118a on p. xv and under B 102 on p. xix, and by A. E. Raubitschek, *RE* 17 (1937) 2254-2257, s.v. "Oinophilos"; and the text has been reproduced by A. Merlin, *Année épigraphique* 1937, No. 6.

² We know this from the form of the name *Τιβέριον Κλαύδιον Ἱεροφάντην Τρικορβέσιον*. Hieronymy (substitution of the title of a sacred office for the personal name of the incumbent) lasts only during lifetime (cf. e.g. *IG II²* 3811).

³ There is a problem concerning the exact identity of the consuls of 87, 143 and 148 A.D. Here, in expectation of the eagerly awaited study of the Roman consuls by the foremost authority Attilio Degraffi, I content myself with reproducing Groag's inferences.

⁴ *PIR² II* (1936) A 118a on p. xv, where he goes only part of the way: "Ad eandem domum videtur pertinere 'Appla' Ἀθηνίων."

⁵ *RE* 17 (1937) 2257, s.v. "Oinophilos."

⁶ Pliny, *NH* 35.2.

⁷ Both in the East and in the West it was a common occurrence that a client left his estate, or part of his estate, to his patron, and even an emperor could take pride in receiving legacies. If, as I assume, the adoption was merely a legal fiction, it is far easier to understand. In any case, I find it unthinkable that the adoption of this aristocratic lady could have occurred before our expect of the *cohors II Hispanorum* became in his old age the revered hierophant of the Eleusinian Mysteries. On the conflict between different rules governing adoption in Greek and Roman law see V. Arangio-Ruiz, *Storia del Diritto Romano*, fifth edition (Naples, 1947) 332. L. Mitteis, *Reichsrecht und Volksrecht in den östlichen Provinzen des römischen Kaiserreichs* (Leipzig 1891) 341, points out that the Greek, like the oldest Roman, testament was built upon the idea of adoption: "Es ist sehr wahrscheinlich, dass die älteste Form der Berufung eines *extraneus heres* die einer wahren *adoptio inter vivos* gewesen ist. In späterer Zeit wurde es üblich, die Adoption (*στωλότης*) einfach im Testament auszusprechen; und dies ist wenigstens in Attika in der Rednerzeit das durchaus Gewöhnliche."

THE INSCRIPTION ON A SILVER CHALICE FROM SYRIA IN THE METROPOLITAN MUSEUM OF ART*

G. DOWNEY, Harvard University, Dumbarton Oaks
PLATES 40-42,C

THE Metropolitan Museum of Art in New York has acquired a silver treasure which includes the celebrated "Chalice of Antioch" (exhibited at The Cloisters), a paten, an inscribed silver cross,¹ three plaques which may have been book covers, and a second (and smaller) chalice (pl. 40), which bears an inscription.² The inscription on this second chalice apparently has not hitherto been completely published.³ The text proves to be of unusual interest because its phraseology indicates that the vessel originated in Syria in the sixth century after Christ. Thus this new text furnishes evidence of importance for the history of the remainder of the treasure with which it is said to have been found.

The fabric of the vessel has suffered damage in several places, and has been repaired in modern times under the supervision of M. Léon André of Paris. The restoration consists of the addition of metal reinforcement inside both the cup and the foot of the vessel. The first part of the inscription, which runs about the outer rim of the cup, is complete. The second part of the text, which runs about the foot of the chalice, has suffered, and traces of only eight letters (about one half of the original characters) remain. However, the formula employed is such that this part of the inscription can be restored with reasonable certainty.

The chalice is 19 cm. in height (maximum dimension) and the rim is 18 cm. (max.) in diameter. The foot is 10.5 cm. in diameter. Traces of ancient gilt remain on both the inside and the outside of the vessel.

The letters of the inscription are incised in outline form. Those on the rim are 1.6 cm. high and the inscription on the rim is 55 cm. in length. The letters on the foot are 1 cm. high and the space available for this part of the inscription is 27 cm. in length. The photographs of the inscription reproduced here (pls. 41 and 42, A-C) give a complete view of the rim and of the foot respectively, reading from left to right in each case; a few letters overlap in each view.

The inscription is as follows:

Rim: + 'Τέρ ἀναπαύσεως Χαρουφᾶ κ(αί) σωτηρίας
Θέκλῃς

Foot: [καὶ τῶν] τέκνων αὐ[τῶν].

(Cross) For the repose of Charouphas and the preservation of Thekla and of their children.

The inscription on the foot may be restored from the similar inscription on the silver paten from Riha, now at Dumbarton Oaks (see further below). The size and spacing of the preserved letters is such that the inscription as restored would fill the available space (with room, possibly, for a cross at the end of the sentence); and the position of the extant letters indicates that the inscription on the foot began at a point exactly below the cross with which the inscription begins on the rim.

In calculating the space available on the foot, it has been assumed that *kai* would be abbreviated as it is in the first line. The last five letters visible on the foot are on two pieces of metal which are both still attached to the flange of the foot, which itself is still in one piece, so that there is no doubt as to the position and sequence of the letters. In one, or perhaps two, instances, missing parts of these letters have been filled in with uninscribed pieces of the ancient fabric which do not belong in these positions. The traces of the first three visible letters (*tek*) are very faint. These are on a single fragment of metal which has been fitted in place with reasonable certainty because its edges fit other parts of the fabric which in turn are attached to the flange. The last word has been restored αὐ[τῶν] (*their children*) rather than αὐ[τῆς] (*her children*) or αὐ[τοῦ] (*his children*) because this represents a more common family situation, though of course the two latter alternatives are not inconceivable.

According to unpublished notes on the inscription left by G. A. Eisen, which Mr. Fahim Kouchakji has kindly loaned me, the foot of the chalice, at the time when Dr. Eisen studied it, contained only the letters which are now visible there. There is one further detail of great interest which Mr. Kouchakji has supplied. At the time when the vessel was found, the fabric

of the foot was more nearly intact than it is now, and was later broken accidentally. Inside the foot Mr. Kouchakji saw the letters ABPAM, presumably the maker's name, stamped three times. These letters are now covered by metal reinforcement which it would be impossible to remove.

The inscription shows that the chalice was presented to a church by Thekla for the repose of the soul of her deceased husband Charouphas and for the preservation of herself and of their children. Charouphas is a characteristic Semitic name,⁴ and its appearance in this inscription suggests that the chalice was made in Syria or Palestine, though Semitic names are of course found in all parts of the Roman Empire.

The chalice exemplifies the wide-spread practice of making an offering—a liturgical vessel, a mosaic, a part of a church, or even a whole church—for the repose of the soul of a deceased relative and for the preservation of the surviving members of the family.⁵ The "repose" is that mentioned in the *Apocalypse of John* (14.13): "And I heard a voice from heaven saying unto me, Write, Blessed are the dead which die in the Lord from henceforth: Yea, saith the Spirit, that they may rest (*ἀναπαύσονται*) from their labors; and their works do follow them." *Σωτηρία* embraces a number of meanings. It could refer to physical safety (e.g. *Acts* 27.34), or to preservation from the assaults of enemies (e.g. *Luke* 1.71), or to the salvation which Christians possess in the present life (e.g. *2 Cor.* 1.6; *Luke* 1.77), or to future salvation (e.g. *Rom.* 13.11). When a prayer is recorded, in a dedicatory inscription, for the *ἀναπαύσις* and the *σωτηρία* of a deceased person, *σωτηρία* is doubtless employed in the sense last named above. When, however, a dedication is made for the *ἀναπαύσις* of the dead and the *σωτηρία* of the living, *σωτηρία* would be employed in one or more of the other meanings mentioned above, and in such cases *preservation* seems the best translation.

The formula which appears on the chalice is employed on the sixth-century silver paten from Riha (near Aleppo) depicting the Communion of the Apostles, which is in the Dumbarton Oaks Collection of Harvard University in Washington, D. C. Around the edge of this paten (in letters not unlike those of the Metropolitan Museum chalice) runs the inscription + Ἐπερ ἀναπαύσεως Σεργίας Ἰωάννου κ(αί) Θεοδοσίου κ(αί) σωτηρίας Μεγάλου κ(αί) Νοννοῦ κ(αί) τῶν αὐτῶν τέκνων.

(Cross) For the repose of Sergia (daughter?) of Ioannes, and of Theodosios, and for the preservation of Megalos and of Nonnos and of their children.⁶

The formula ὑπερ ἀναπαύσεως καὶ σωτηρίας is of particular interest because it reflects very closely one of the prayers in the Dismissal in the Liturgy of the Syrian Jacobites. At the beginning of the Dismissal, the priest says:

Bless us all, preserve us all, protect us all, show us all the way of life and salvation and from the mouths of us all let there ascend praise to thy majesty, o Lord of us all. Yea, o Lord, and all the faithful who have taken part in this eucharist which was brought in and uplifted and set in its place on this holy altar, may God who accepted the offerings of the holy fathers himself accept their offerings and vows and tithes, and bless them that are afar off and protect them that are nigh and grant rest [= *anapausis*] and a good memorial to their dead and a blessed hope and preservation [= *soteria*] to their living.⁷

The juxtaposition in this prayer of appeals for rest and preservation, made just after the completion of the eucharist, suggests that the phraseology of the inscriptions on the eucharistic vessels in the Metropolitan Museum and at Dumbarton Oaks is a conscious reminiscence of this prayer, or of a similar prayer which does not happen to have been preserved. Practically all the eastern liturgies contain, at various points of the service, separate prayers for the *anapausis* of the dead⁸ and for the *soteria* of the living.⁹ However, these requests for *anapausis* and *soteria* occur independently of each other, and in many cases the prayer for the living precedes the prayer for the dead. The prayer of the Syrian Jacobites quoted above is the only extant petition (at least so far as the present writer has been able to discover) in which a request is made for *anapausis* and *soteria* in this order, and in the same sentence.

Some of the inscriptions on the liturgical vessels of the Hama treasure (in the Walters Art Gallery, Baltimore) and of the Stouma treasure (in the Museum at Constantinople) are of essentially the same character as those on the Metropolitan Museum chalice and the Dumbarton Oaks paten. The two Stouma patens are inscribed respectively + Ἐπερ εὐχῆς κ(αί) σωτηρίας Σεργίου κ(αί) Ἀννας κ(αί) ἀναπαύσεως Δομετίου [καί] Ἰωάννου

(In fulfilment of a vow and for the preservation of Sergios and Anna and for the repose of Dometios and Ioannes) and + Ἐπερ εὐχῆς κ(αί) σ[ωτηρία]ς Σεργίου τ[οῦ] ἀργυροπράτου κ(αί) ἀναπαύσεως Μαρίας τῆς αὐτοῦ συμβίου κ(αί) τῶν αὐτῶν γ(ο)νέων

(In fulfilment of a vow and for the preservation of Sergios the money-changer and for the repose of Maria his wife and of their children).¹⁰ Here the phrase in fulfilment of a vow has been added, and *soteria* and *anapausis* are mentioned in reverse order. The vessels of the Hama treasure exhibit various types of inscriptions. The majority of the texts simply state that the utensils are offered ὑπερ εὐχῆς, in fulfilment of a vow.¹¹ Two chalices are offered ὑπερ εὐχῆς καὶ σωτηρίας, in fulfilment of a vow and for preservation,¹² and a

vase and a cross show the same formula.¹³ However, a vial for holy oil¹⁴ is offered + Ὅτις εἶχῃς καὶ σωτηρίας Μεγάλῃς + καὶ τ(ῶ)ν αὐτῆς τέκνων καὶ ἀνεψιῶν καὶ ὑπὲρ ἀναπαύσεως Ἑλιοδώρου καὶ Ἀκακίου

(In fulfilment of a vow and for the preservation of Megale and of her children and nephews and for the repose of Heliodoros and Akakios). Here the arrangement of the formula is the same as that in the inscriptions on the two Stouma patens. The purpose of these three dedications, then, was essentially the same as that of the dedications of the Metropolitan Museum chalice and the Dumbarton Oaks paten; the purpose is expressed with slightly different wording and with the addition of the statement that the offering is made in fulfilment of a vow. It should be noticed that the occasion for the dedication of the vessel sometimes seems to determine the order in which the names of the living and the dead are mentioned. Thus, when a donor offers a vessel in fulfilment of a vow, he appears to mention his own name first, with a prayer for his own *soteria*, and then to list the names of deceased relatives, for whose *anapausis* a prayer is added.

While it would be natural to inscribe sentiments of hope for *anapausis* and *soteria* on liturgical vessels presented to churches, it seems more than coincidence that the inscriptions on the Metropolitan Museum chalice and the Dumbarton Oaks paten reproduce closely the phraseology of the prayer in the Liturgy of the Syrian Jacobites which seems to occur, in this form, in no other liturgy, and that the two Stouma patens and the vial in the Hama treasure use the same phraseology in slightly altered form. The Jacobite Church was strong in Syria, where it served to keep alive the Monophysitic heresy. It was founded by Jacob Baradaeus, who was ordained bishop of Edessa in A.D. 542 under the protection of the Empress Theodora, and continued to labor among his fellow-heretics in Asia Minor, Mesopotamia and Syria until his death in A.D. 578. The patriarchate of Antioch was a stronghold of the Monophysites, who were so powerful that in spite of the imperial government's efforts to stamp out the heresy episcopal cities in Syria often had two rival bishops simultaneously, a "Chalcedonian" and a "Jacobite."¹⁵ All the vessels whose inscriptions have been studied here are said to have been found in this general region; and those from Riha and Hama are dated in the sixth century, those from Stouma in the seventh. These circumstances seem to show beyond reasonable doubt that the inscriptions on these vessels (including the Metropolitan Museum chalice) are conscious quotations, of greater or less exactitude, of the prayer of the Jacobite Liturgy quoted above.¹⁶

These inscriptions, then, take their place among the

numerous votive texts which were inspired by liturgical usage. An impressive number of the building inscriptions of northern Syria contain phrases and formulas found in the various liturgies in use there.¹⁷

The Riha chalice in the Tyler collection is inscribed τὰ σὰ ἐκ τῶν σῶν σοὶ προσφέρομεν Κύριε, *We offer thee, Lord, thine own, of what is thine own*, a phrase which occurs in nearly all of the Greek liturgies and in many inscriptions of Syria and Palestine; it was also placed on the altar of St. Sophia by Justinian and Theodora.¹⁸ Matching this usage in the west is the silver chalice of Zamon in the Tyrol, inscribed + DE DONIS DEI VRSVS DIACONVS SANCTO PETRO ET SANCTO PAVLO OPTVLIT. This reproduces the corresponding phrase of the Roman rite, *de tuis donis ac datis offerimus*.¹⁹ The bronze eucharistic bowl in the Berlin Museum, which was excavated at Pergamum, is inscribed with words even more closely connected with its employment, + Πιερε ἐξ αὐτοῦ πάντες · τοῦτό ἐστιν τὸ (αἷ)μά μου, *Drink ye all of it; this is my blood*.²⁰

As a final example may be quoted a liturgical phrase which has become well known because of the frequency with which it occurs among the building inscriptions of Syria and Palestine, Μνήσθητι Κύριε τῶν καρποφορούντων καὶ καλλιεργούντων ἐν ταῖς ἀγίαις σου ἐκκλησίαις, *Remember, Lord, those who bring offerings and create fair works in thy holy churches*.²¹

There are of course many other liturgical phrases to be found in inscriptions, the collection of which would exceed the bounds of the present paper.²² Enough has been said to suggest the interest and value of such texts for our appreciation of the spirit in which the offerings were made.

With regard to the types of inscriptions placed on eastern chalices, there would seem (though our material is not extensive) to have been no one inscription or sentiment which was considered peculiarly appropriate for a chalice as such. The most fitting text is that on the Pergamum eucharistic bowl: *Drink ye all of this; this is my blood*. It is noteworthy that this inscription occurs on a humble bronze vessel, which may have been purchased by the church in which it was used, instead of being the gift of an individual. The more costly silver vessels, the gifts of donors, bear the givers' names instead of scriptural quotations. In these cases the guiding factor in the selection of a text seems to have been the occasion of the offering i.e. the fulfilment of a vow, a prayer for the dead, or an appeal for the living, rather than consideration of the use to which the vessel would be put; and while the phraseology chosen was often that of the service during which the chalice would be employed, the use of the same phraseology on other communion vessels, as well

as on chalices, suggests that no one sentiment or wish came to be associated exclusively or primarily with a specific type of utensil.²³

December 1948

*I am indebted to Messrs. James J. Rorimer and William H. Forsyth of the Department of Mediaeval Art of the Metropolitan Museum for the kind invitation to study the inscription and permission to publish it. The photographs reproduced here were made by the Metropolitan Museum. I am likewise indebted to Mr. Fahim Kouchakji of New York for information regarding the chalice and for the loan of notes on the inscription made by the late G. A. Eisen. I have also to thank Dr. Carl H. Kraeling of the Oriental Institute, my colleague Professor Ernst Kitzinger, and Professor William K. Prentice of Princeton University for assistance in the preparation of this study. For the abbreviations used here, see *AJA* 54 (1950) 269-272.

¹One side of this cross is inscribed with the *Trisagion* in the form in which it first appears at the Council of Chalcedon in A.D. 451: "Ἄγιος ὁ Θεός, ἅγιος ἰσχυρός, ἅγιος [ἀθάνατος, ἀλ[έ]σων ἡμᾶς. *Holy God, holy and strong, holy and immortal, have mercy upon us* (for the history of this anthem, see B. J. Kidd, *A History of the Church to A.D. 461* [Oxford 1922] III 317). The other side is inscribed with the names of the donors: "Τῶν [Ἡεροδότου καὶ Κομῆται Παντ[α]λέωντος. *For Herodotus and Komilas (sons) of Pantaleon*.

²A valuable survey of the literature connected with this treasure is provided by H. H. Arnason, "The History of the Chalice of Antioch," *BiblArch* 4 (1941) 50-64; 5 (1942) 10-16. See also A. B. Cook, *Zeus* (Cambridge 1914-1940) II, 2, pp. 1197-1210, and Marvin C. Ross, "A Second Byzantine Silver Treasure from Hamah," *Archaeology* 3 (1950) 162-163.

³Only two allusions to the Greek text have hitherto been published, so far as the present writer has been able to discover. One was made by W. F. Volbach, *Metallarbeiten des christl. Kultes in der Spätantike u. im frühen Mittelalter* (Kataloge des röm.-germ. Central-Museums, No. 9; Mainz 1921), p. 13, no. 2, where the inscription is given as "Τῶν τῆς σωτηρίας τῆς Θεότης. Volbach presumably had not seen the chalice, which at the time when he wrote (as he notes) was in private hands in New York. His version does not agree with the letters visible (CΩTHPIACΘEKA) on the photograph which he produces on p. 36. Volbach had already written on the chalice (without giving the text of the inscription) in "Ein antiochenischer Silberfund," *Germania* 2 (1918) 23-25. In his article "Un nouveau trésor d'argenterie syrienne," *Syria* 7 (1926) 105, n. 2, Ch. Diehl mentions the chalice and gives the inscription as "Τῶν εὐχῆς καὶ σωτηρίας Θεότης . . . (sic.) Diehl presumably had not seen the chalice. A translation of the complete inscription is given by G. A. Eisen, *The Great Chalice of Antioch* (New York 1933) 20. The chalice has been illustrated by Eisen, *op. cit.* 21 and by J. Braun, *Das christl. Altargerät* (Munich 1932) pl. 10, no. 30 (cf. pp. 78 ff.). It is mentioned, but not described, by G. A. Eisen in his earlier and larger work, *The Great Chalice of Antioch* (New York

1923) I 3, and by J. Wilpert, "Early Christian Sculpture: Its Restoration and its Modern Manufacture," *ArtB* 9 (1926-7) 136. See also W. F. Volbach, "Der Silberschatz von Antiochia," *Ztschr. f. Bildende Kunst* 32 (1921) 110 ff.; *id.*, "Die byz. Ausstellung in Paris," *ibid.* 65 (1931-2) 102 ff.; and *Expos. intern. d'art byz.* (Paris 1931) no. 396.

⁴Three monks of Syria Secunda who sign themselves (in Latin) Carufas were among the numerous signatories of an address to Pope Hormisdas (A.D. 514-523) in which an appeal is made for protection against the Eutychians: J. D. Mansi, *Sacrorum Conciliorum Nova Collectio*, VIII (Florence 1762), 427 A, 428 D, 429 B. The accentuation of the name is uncertain. No examples of it are cited by H. Wuthnow, *Die semitischen Menschennamen in griech. Inschriften u. Papyri des vorderen Orients* (Studien zur Epigraphik u. Papyruskunde hrsg. v. F. Bilabel, I, 4; Leipzig 1930). It is worth noting that the presence of this rare but characteristic name is a strong argument in favor of the genuineness of the chalice. It seems difficult to believe that a forger would have either enough knowledge or enough audacity to choose such a name.

⁵Examples of such dedicatory inscriptions are collected by L. Jalabert and R. Mouterde, "Inscriptions grecques chrétiennes," *DACL* 7 (1926) 688-689. Examples will be cited *infra*.

⁶Ch. Diehl, "L'école artistique d'Antioche et les trésors d'argenterie syrienne," *Syria* 2 (1921) 86-87, with pl. 14, M. Rosenberg, *Die Goldschmiede Merkmzeichen*, ed. 3, IV (Berlin 1928) p. 678, no. 9879 (with photograph); *IGLSYR* no. 695, with bibliography; *The Dumbarton Oaks Research Library and Collection of Harvard University: Handbook of the Collection* (Washington D.C. 1946) p. 53, no. 102, with photograph on p. 56. By a misprint, the third proper name in the text of Jalabert and Mouterde is given as Θεοδόρου instead of Θεοδορίου. Instead of *Sergia*, (daughter?) of *Ioannes*, the meaning may be of *Sergia* (and) of *Ioannes*; for a similar ambiguity, see *PAES* III B, no. 924. Nonnous is a feminine name; see commentary on *IGLSYR* no. 695.

⁷This Liturgy is preserved only in Syriac; the translation given above is that printed by F. E. Brightman, *Liturgies Eastern and Western* I (Oxford 1896) 105, 30-106, 5.

⁸Prayers for repose: Brightman *op. cit.*, Lit. of the Apostolic Constitutions, 23, 28; Lit. of St. James, 47, 5; 62, 17; Lit. of the Syrian Jacobites, 74, 8-9 (two prayers); 75, 13; 83, 9; 95, 35; 99, 3; 106, 15; Lit. of St. Mark, 128, 23; 129, 16; Lit. of the Coptic Jacobites, 157, 27; 169, 7; 179, 10; Lit. of St. Basil of the 9th cent., 332, 4; Lit. of St. John Chrysostom, 332, 4; Lit. of the Armenians, 424, 36-37; 443, 17.

⁹Prayers for salvation: Brightman, *op. cit.*, Lit. of the Apostolic Constitutions, 25, 22; Lit. of St. James, 47, 5; 62, 17; Lit. of St. Mark, 113, 21; 120, 5; 141, 19; Lit. of the Coptic Jacobites, 153, 7; 165, 37; 166, 37; 183, 18; Lit. of the Nestorians, 257, 1; 288, 29; Lit. of St. Basil of the 9th cent., 313, 18; Lit. of the Armenians, 424, 29-30. This enumeration does not include prayers *ἐπὶ σωτηρίας καὶ ἀντιλήψεως*, for preservation and succor (e.g. 34, 18-19; 36, 29-30; 39, 10; 138, 30-31) and *ἐπὶ σωτηρίας καὶ ἀφέσεως ἁμαρτιῶν*, for preservation and remission of sins (e.g. 138, 28-29; 185, 13), which should

be regarded as more specific appeals than prayers *ὡς ἡ σωτηρία*.

¹⁰ J. Ebersolt, "Le trésor de Stouma au Musée de Constantinople," *RA* ser. 4, tom. 17 (1911, tom. 1), 407-419, with pl. 8; *IGLSYR* nos. 697-698, with bibliography.

¹¹ Ch. Diehl, "Un nouveau trésor d'argenterie syrienne," *Syria* 7 (1926) 107, no. 3 (chalice); 107, no. 4 (paten); 107, no. 6 (paten); 107-8, no. 7 (ewer); 108, nos. 8-9 (candelabra); 111, no. 17 (spoon). The silver chalice in the British Museum (*A Guide to the Early Christian and Byzantine Antiquities*, 2d ed. [London 1921] p. 108, fig. 65 is inscribed + *Τὸ ἐπ' εὐχῆς Σεργίου καὶ Ἰωάννου*, (*Cross*) *In fulfilment of a vow of Sergios and Ioannes*. For a copy of this inscription I am indebted to Prof. E. Kitzinger. Similar phrases are common among the building inscriptions of Syria, e.g. *PAES* III B nos. 855, 867, 922, 925, cf. nos. 1004, 1173. On the Hama treasure see also *Walters Art Gallery: Handbook of the Collection* (Baltimore 1936) p. 57 (fig.) and *Early Christian and Byzantine Art, an Exhibition Held at the Baltimore Museum of Art . . . Organized by the Walters Art Gallery* (Baltimore 1947) nos. 394-411, with bibliography.

¹² Diehl *op. cit.* 106, nos. 1-2.

¹³ Diehl *op. cit.* 109, nos. 11-12.

¹⁴ Diehl *op. cit.* 108-109, no. 10.

¹⁵ J. B. Bury, *History of the Later Roman Empire* (London 1923) II 391; R. Devreesse, *Le patriarcat d'Antioche* (Paris 1945) 75-93, 292; E. Stein *Histoire du Bas-Empire* II (Paris 1949) 623-632.

¹⁶ There may be some significance in the circumstance that the Syrian Jacobite Liturgy contains many more prayers for *anapausis* than the other liturgies (*supra* n. 8). As a persecuted sect, the Jacobites may well have felt themselves burdened beyond other men, so that one of their hopes would be for *anapausis* for their dead (and eventually for themselves). This prepossession may be reflected in the inscriptions on the liturgical vessels from Syria, which mention *anapausis* relatively frequently. The liturgies often reflect very faithfully the conditions of life of the congregations for which they were designed, e.g. the prayers of the Egyptian rite include appeals for the regular flooding of the Nile and for a regular supply of drinking water. While the question may not arise in connection with the vessels studied here, it should be pointed out that the foundation of the Jacobite Church in the sixth century does not necessarily furnish a *terminus post quem* for the dating of inscriptions which contain reminiscences of phrases used in the liturgy of this church. Such liturgies were fluid and living services; it is difficult (without either special internal evidence or independent documentation) to determine at what date some of them achieved definitive form, and at what dates certain prayers would have been introduced into them. It is thus possible that the prayer for *anapausis* and *soteria* discussed here was actually in use by Monophysite congregations before the establishment of the Jacobite Church.

¹⁷ W. K. Prentice, "Fragments of an Early Christian Liturgy in Syrian Inscriptions," *TAPA* 23 (1902) 81-100; *idem* in *AAES*, pp. 8-17, 222-223.

¹⁸ Cf. Brightman *op. cit.* (*supra*, n. 7) 329, 7 (Liturgies of St. John Chrysostom and of St. Basil); 36, 6-7 (Lit. of

St. James); 133, 30-31 (Lit. of St. Mark); 178, 15-16 (Lit. of the Coptic Jacobites). In all these cases the thought evidently comes ultimately from I *Chronicles* 29.14; cf. also *Ecclesiasticus* 38.24. See Prentice's commentary on *PAES* III B no. 920; *IGLSYR* no. 694; and S. J. Saller, *The Memorial of Moses on Mount Nebo* (Publ. of the Studium Biblicum Franciscanum, I; Jerusalem 1941) 252-253. On the chalice, see *Victoria and Albert Museum: Catalogue of Chalices and Other Communion Vessels* (London 1922) 12, with pl. 1; H. Peirce and R. Tyler, *Byzantine Art* (London 1926) 26-27, with pl. 20; M. Rosenberg, *Die Goldschmiede Merkzeichen*, ed. 3, IV (Berlin 1928) p. 701, no. 9936 (with photograph).

¹⁹ G. B. de Rossi, *Bull. di arch. crist.* ser. 3, v. 3 (1878) 159-162, with pl. 12; *Victoria and Albert Mus., Cat. of Chalices* (see preceding note) 12; H. Leclercq, "Calice," *DACL* 2, 1632-1634.

²⁰ *Matt.* 26.28; *Mark* 14.23-24; cf. 1 *Cor.* 11.25; *Luke* 22.20. For the use of the phrase in the liturgies, see Brightman *op. cit.* (*supra*, n. 7) 20, 21-22; 52, 13; 87, 14; 133, 8-12; 177, 23; 285, 17; 328, 15. The bowl is published by O. Wulff, *Altchristl. u. Mittelalterl. byz. u. italien. Bildwerke*, Teil 2: *Mittelalterl. Bildwerke* (K. Museen zu Berlin, Beschreibung der Bildwerke der christl. Epochen, 2d ed. [Berlin 1911] p. 93, no. 1984, with pl. 16).

²¹ For the prayer, see Brightman *op. cit.* (*supra*, n. 7), 45; 56, 12 (Lit. of St. James); 332, 19-22 (Lit. of St. Basil); 336, 8-10 (Lit. of St. John Chrysostom). Among epigraphical examples may be cited *IGLSYR* no. 494; the dedicatory inscription of a church in Rihab, Trans-Jordan, of the late sixth or early seventh century, M. Avi-Yonah, "Greek Christian Inscriptions from Rihab," *QDAP* 13 (1947) 68; and the mosaic inscription of "Church No. 2" at Madaba, reproduced by H. Leclercq, "Madaba," *DACL* 10.862.

²² Several examples are studied by Saller *op. cit.* (*supra* n. 18) 253-271.

²³ The same conclusion is indicated by examination of the inscriptions on western chalices: H. Leclercq, "Calice," *DACL* 2.1642-1643.

AN OLD NUBIAN INSCRIPTION FROM KORDOFAN

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PLATE 42,D

THE Abu Negila hills are a sandstone range situated about 16°25' N, 30°4' E approximately 35 miles south of the Wadi El Milk. Between it and them lie the rather better-known Awadun Hills. At the northern end of the Abu Negila hills there is a narrow gorge with sheer sides 25-30 ft. high running out to the west. About half way up this gorge is an old well known as Bir el Kai. This well was found by an Arab who noticed the grooves made by ropes in the rocks above it, and reopened it in 1938. There is reason to think that there are six more ancient wells in the gorge waiting to be reopened.

In April 1939 when I was Commissioner for Archaeology and Anthropology in the Sudan Government, Mr. Peter Hogg, then Assistant District Commissioner Northern Kordofan, reported to me that the south wall of the gorge is covered with petroglyphs representing animals (mostly crude camels, but some better drawn giraffes, elephants, cattle and ?oryx), signs, some of which are recognisable as modern tribal brands but others are probably older, and Arabic inscriptions, one of which may prove to be of historical value. There are also several crosses, including two Maltese ones near one of the unopened ancient wells. But the most important discovery so far in this interesting gorge is a graffito in Old Nubian, which is seven feet up the cliff face about a quarter of a mile south of Bir el Kai; and of which Mr. Hogg succeeded in taking an excellent photograph (pl. 42, D). I sent the photograph to Professor Dr. Ernst Zyhlarz at Hamburg and received his reply in the week before the Second World War; and it is the war which must be blamed for the delay in making this find known.

The inscription is preceded by a cross indicating as usual that the writer was a Christian, and is read by Professor Zyhlarz as follows:

ⲁⲓ ⲁⲛⲉⲛⲁ ⲛⲁⲥⲓⲧⲟ ⲟⲩⲣⲟⲩⲗ ⲁⲩⲣⲟⲩⲗⲁ

and translated by him 'I Anena from Cush when Aaron was King'. He considers that *ⲛⲁⲥⲓⲧⲟ* is an exact transcription of the Meroitic *ⲛⲥⲓⲧ* meaning "from Cush" i.e. a native of an area still calling itself by the name of the Meroitic Kingdom. The first letter

of the king's name is doubtful, but Prof. Zyhlarz restores it as A with confidence, and comments that *ⲣⲣ* occurs for *ⲣ* occasionally in Old Nubian texts, as for instance *ⲛⲣⲣⲁ* for *ⲛⲣⲁ* and *ⲧⲣⲣⲁ* for *ⲧⲣⲁ*.

From the geographical situation of the inscription it seems probable that King Aaron must have belonged to the Kingdom of Dongola and not to the Kingdom of Alwa. But the memory of the Kingdom of Meroe destroyed by Axum in ca. A.D. 350 seems to have been still alive and the writer proud of his descent from one of the great Meroitic families, who would naturally have taken refuge among their erstwhile vassals west of the Nile, when their kingdom had been overthrown by an expedition emanating from the east.

Further west, the Shelkota section of the Meidob in Northern Darfur, who call themselves Kagiddi, have a tradition that they came from the east led by a queen who is buried in a tumulus near Jebel Kabeiija in south-eastern Meidob. The name Meidob is derived from *peida* which means "slaves" in the Nubian language of these people, and Kagiddi in the same language means "the people of Kag." This name is presumably connected with that of the Kaja, the people of the hills of western Kordofan, with whom the Kagiddi still acknowledge a relationship, and who live south-east of Jebel Meidob and south-west of the Abu Negila hills. It does not seem too fanciful to see in Cush the common basis of all these names.

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THE BRONZE AGE IN THE NEAR EAST: A REVIEW ARTICLE

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I

Claude F. A. Schaeffer is known to the archaeological world as the indefatigable explorer of the fabulous site of Ugarit-Ras Shamra in Syria, as excavator of Enkomi in Cyprus and of Malatya in Turkey, as the author of numerous publications on Prehistoric European and Near Eastern archaeology, and as a scientific organizer of great capacity. Only a great doer of deeds could carry to completion a book of such magnitude as *Stratigraphie Comparée*,¹ while serving his country in military and diplomatic affairs. The book was written during the war (1941-46); and the introduction, in which the author supplies a picturesque account of the interplay of his military and scholarly activities, will surely be accounted one of the most remarkable biographical sketches in the history of archaeological scholarship.

Because the *Stratigraphie* is a monumental work presenting a significant theory, it merits a careful and detailed appraisal of its subject, its thesis, its method, and its material.

It was a legitimate and natural thought to utilize the cessation of archaeological activity during the Second World War for a systematization of the knowledge gained about the ancient Near East. A period of exciting discoveries had just drawn to a close. Not since Schliemann's resurrection of Prehistoric Greek civilization had any field of ancient studies experienced an enrichment comparable to that brought about for the ancient Near East by the excavations from 1919 to 1939. Attempts to coordinate and expound the newly gained knowledge were not altogether lacking. Thus, for the Prehistoric horizons, the work of V. Gordon Childe and his followers integrated the results of Near Eastern excavations into the picture of the evolution of humanity, a picture drawn essentially on the materialistic conviction that the march of mankind was conditioned by technological developments. The Near East was thus seen as the focal point in the "agricultural revolution" regarded as prerequisite to the development of higher stages of civilization. An ardent belief in the cultural and intellectual significance of the Near East inspired James H. Breasted to map magnificent plans of ex-

ploration and to replace the isolating treatment of Near Eastern regions by the concept of the "Fertile Crescent." The post-war trend toward archaeological synthesis is manifest in several publications which appeared practically at the same time as Schaeffer's book and traverse at least in part the same ground. Had Henry Ware Eliot been able to carry out his plan of providing detailed critical presentations of major sites in Western Iran, Mesopotamia, and Syria, we should have had a *corpus* of stratigraphic information that would have provided instructive comparisons with Schaeffer's book.² As it is, the admirably concise survey of results obtained from excavations in Mesopotamia, Syria, Palestine, Cyprus, Asia Minor, Persia, India, and Greece compiled by J. R. Stewart and Dr. Eilers is perhaps the most nearly comparable venture.³

Numerous investigations of some parts of the material covered by Schaeffer either on a typological⁴ or on a regional⁵ basis have appeared and are still appearing, while investigation of chronology of the ancient Near East based on literary sources has been the subject of a lively debate stimulated to a considerable degree by the work of S. Smith⁶ and W. F. Albright.⁷

Schaeffer's book differs from the few major works of chronological and archaeological synthesis devoted to the Near East in several important respects.

(1) In contrast to most other scholars concerned with chronology, the author does not begin with Mesopotamia, which he appears to reserve to another volume (535). In view of the paramount importance of written evidence from Mesopotamia for the history of the Eastern Mediterranean this omission may be regarded as a weakness.⁸ It is balanced, however, by the inclusion of Iran and Caucasus. This addition imposes an important adjustment upon our focus as it links the Mediterranean littoral and the "mountain countries" (plus their hinterlands), those regions toward the east which time and again appear as a problematic and enigmatic factor in the history of the Near East.

(2) In defining his "geographical field" Schaeffer was motivated not only by historical considerations. The area thus surveyed includes numerous zones of

high seismological activity susceptible to earthquakes. According to the author, earthquakes and their results are an integral part of that study which he defines as "comparative stratigraphy." What is "comparative stratigraphy"? In the understanding of this reviewer, any study in which the sequences at various sites are systematically compared and related, falls under this term, but this is obviously not Schaeffer's view. Neither in the introduction (x-xiii) nor in the first chapter entitled *Exposé de la Méthode* do we find any general propositions about the method and procedure of comparing levels at different sites. The key to Schaeffer's definition is provided by his remarks that he desires to introduce in archaeology the new method of *stratigraphie sismologique*, stratigraphy based on seismological phenomena. He has observed at Ugarit two destruction levels which he believes to have been caused by earthquakes. The same earthquakes, Schaeffer argues, must have been felt in extensive areas defined by "geological laws." On the basis of these considerations he presents the following scheme of chronology determined by six (or seven) destructions:⁹ I, 2400-2300 B.C.: Caused, at least in part, by earthquakes. II, 2100 B.C. III, 1900 B.C.: Very extensive, caused by earthquake. Industrial and metallurgical revolution in the Near East and Prehistoric Europe results. IV, 1700-1550: Hiatus in habitation or extreme poverty. Schaeffer hints that climatic changes were the ultimate cause. V, 1450: Relatively small disturbance, apparently again an earthquake. V, 1365: Strong earthquake. VII, 1250-1225 B.C.: Migrations of Sea and Land Peoples and other races prompted by some kind of natural catastrophe.

This Table of Destructions is not wholly consistent; in the course of his work the author has shifted from a *stratigraphie sismologique* to a more general *stratigraphie catastrophique* (cf. his admission about the change in point of view, 561 ff.). The latter doctrine holds that the history of the ancient Near East was conditioned by natural catastrophes. The author states his premises as follows:

(1) Ancient civilizations were dependent on nature to a much greater degree than modern. They were helpless in the face of major natural disasters.

(2) Whenever a major natural disaster struck, it struck simultaneously throughout the Near East, "from Caucasus in the North to Egypt in the South-West and Persia in the South-East." It is a law that these catastrophes are reflected in the destruction levels of the various urban centers.

(3) These destruction levels are therefore contemporaneous.

(4) Natural catastrophes caused mass movements such as migrations and invasions. These are, however, only byproducts. "The successive crises by which the

main periods begin and close were not provoked by actions of men" (535).

(5) Actions of kings, rulers, and leaders are unimportant compared with the extent of these general crises and their profound effects (535).

(6) After such catastrophes (and apparently particularly after earthquakes) "human masses became desperate and constituted a redoubtable danger for the attractive countries such as the Fertile Crescent, Mesopotamia, and Egypt."

Thus Schaeffer develops a theory of history which is a variant of the well-known doctrine that changes of natural environment play a decisive part in the history of mankind. Such a concept makes men the driven rather than the drivers and is fundamentally the opposite of that theory of history which sees man's invention of tools as part of the process of acquiring mastery over nature (as in the Classic Sequence of Stone, Bronze, and Iron Ages) or more elaborately in Childe's technological concept of history. It differs, too, from the "organic" theory which sees cultures as individualities which are born, grow, and decay. It denies the "ideological" and "psychological" theories which make men's thoughts and feelings responsible for their propensity for hitting each other over the heads with sticks, stones, or atomic bombs—and thus producing catastrophes and destructions.

Whatever general theoretical stand we may take, the immediate issue is the applicability of Schaeffer's theory to the Near East in the second millennium B.C. Royal records of the Near East are full of tales of destructions of cities, largely by inter-city warfare. In the case of the Assyrians, where the matter can be checked at a certain number of sites, it does, indeed, appear that the cities were destroyed, and thoroughly.¹⁰ The same is true (and Schaeffer does not dispute this) of the invasions of the Sea and Land Peoples in the late thirteenth and the early twelfth centuries B.C.

When we turn to natural causes for destructions, literary sources record a number of earthquakes from Sumerian times on;¹¹ other earthquakes may be more or less plausibly inferred.¹² But nowhere, as far as the written records go, does there seem to be evidence of earthquakes as far reaching and as totally destructive as those postulated by Schaeffer. We may note here that Schaeffer has not attempted to bolster his chronological scheme by a consideration of the dated earthquakes¹³ mentioned in the literary sources, with the exception of the reference in the El Amarna tablets which he interprets as indicating an earthquake in Ugarit in 1365 B.C.¹⁴ But even if such earthquakes had occurred at Ugarit, their effects would have been serious only in the immediate vicinity of that site. Even the strongest earthquake ("8" in the "absolute" or "magnitude" scale) can devastate cities only

within a fairly narrow radius from its epicentre (*ca.* 50-60 miles). It is true that earthquakes of "intermediate depth" may be *felt* over a rather extensive area, but large-scale destruction of the kind that collapses walls would again be limited to a relatively small area. One might argue that the geological situation was different in the ancient Near East; but modern geologists say that it was not and that there is no reason to believe that seismic intensity was in any substantial degree greater then than it is now. In his appeal to "geological laws" Schaeffer has over-extended the position taken by geologists.¹⁶ Of the other "natural causes" only drastic changes of climate might have consequences sufficiently far-reaching to satisfy Schaeffer's theory. Proof of such changes might be obtainable after minute and detailed scientific investigation of geological, zoological, and botanical data associated with datable archaeological levels of the period from 1700 to 1550 B.C., for which Schaeffer appears to argue a major change of climate. We need a great many reports of this nature, before any scientific conclusion can be arrived at; but it may be pertinent to mention Mallowan's remarks on the sites of Tell Brak and Chagar Bazar, both of which play an important part in Schaeffer's arguments. After appraising the results attained from examination of wood, cereals, and animal remains and after examining the written evidence provided by tablets, Mallowan concludes that these sites of the Khabur and Balih valleys supply no evidence of a radical change of climate. "The two main causes for the decline of prosperity (from the Bronze Age level) are deforestation, due to lack of human foresight; and warfare with the consequent interruption in the organization of agriculture (irrigation)."¹⁶ There is merit in Schaeffer's attempt to make archaeologists take into account causes of destruction other than actions of men. Anyone who has lived through the rainy season in the Near East will understand the sentiment which crystallized the stories about floods (or the Flood). Droughts and famines (the Biblical seven lean years) may also have caused abandonment of settled places and impelled peoples to migrate. But in the long run, the ups and downs of human civilization in the historical periods of the Near East seem to have been caused by men.¹⁷

So much for Schaeffer's general thesis. The bulk of the book, however (Chapters II-IX, 8-533) is devoted to the examination of individual sites with the avowed aim of ascertaining the location of destruction levels. The amount of ground covered is staggering. The comparative charts alone contain twenty-eight areas and well over seventy sites are discussed in detail. There are numerous plans, sections, and stratigraphic charts. A particularly felicitous addition are the fine views of sites and excavations which convey

something of the mood and setting of ancient cities, an aspect of archaeology which excavators cherish and enjoy but rarely manage to get across to their public. Several thousand objects are reproduced in drawing and (a small part) in photographs. The drawings vary in size (once there are seventy-six objects on one plate) and quality. They are fine as supports for memory, but it would not be advisable to use them in establishing typological refinements. Archaeologists, who like to read a book starting from the illustrations, will find only limited encouragement; individual objects are not identified in either the captions or the list of illustrations and references to the sources for the drawings are very general, usually only the name of the author from whose work the drawing was made. On the other hand, there are careful cross-references to Schaeffer's text.

Regardless of Schaeffer's general theories, the book has great value as an archaeological encyclopedia of the Near East. The sites on the coast of Syria, in the interior of Syria, in Palestine, Phoenicia, Asia Minor, Cyprus, Persia, and Caucasus are taken up individually and in each case the sequence suggested by the excavators is compared to that which the author has established for Ras Shamra. The conclusions are juxtaposed in the form of charts, which make it possible to grasp the results almost at a glance. To this task the author brings his long experience as an excavator, a thorough acquaintance with the Bronze Age material of the Eastern Mediterranean, a commendable awareness of the value of epigraphic material, and that admirable quality of concise and lucid exposition which archaeological audiences in this country had occasion to admire in his Norton lectures for the Archaeological Institute of America. Many a student, baffled in his attempts to ascertain the stratigraphic situation of a site through a series of meandering and detailed reports scattered in various journals, will breathe a sigh of relief and seek enlightenment in these simple yet penetrating discussions.

Schaeffer is a man with a thesis. Herein lie his virtues and his vices. These are his assets: (1) His general position makes it incumbent upon him to synchronize all major destructions throughout his area. This is not always quite as arbitrary as it may sound, because in a number of instances (Beit Mirsim, Troy), he can point to approximate coincidence with results previously arrived at by other scholars. There is also fairly general agreement about some sort of destructive events in Palestine during the Early Bronze Age, and in many areas during the Hyksos era and during the invasions of the Sea Peoples around 1200 B.C. (2) The very fact that Schaeffer attempts to impose a clear-cut chronological scheme upon the material makes for a synthesis which is in itself clear-cut. His chronological scheme certainly

represents the most consistent and most comprehensive hypothesis advanced for the ebb and flow of civilization in the vast area which he surveys. (3) Schaeffer's premises permit him to avoid any detailed involvement with the identification of ethnic groups and to place the emphasis on the over-all development of material culture. This may be a danger, where good historical tradition is available,¹⁸ but where historical tradition is uncertain or lacking, a book which dispenses with hypothetical movements of even more hypothetical peoples is distinctly refreshing. (4) As Schaeffer confines his range to the period from 2500 to 1200 B.C., he is in a position to consider the material more intensively than excavators who have to take up all periods from Prehistoric to Islamic. Throughout the book he draws a number of typological comparisons, especially of pottery and metal work, which are new and valuable and will be welcomed by excavators and other students concerned with the Bronze Age. (5) Although many excavators will view with skepticism Schaeffer's re-interpretations of their sites, they will have before them a "heuristic hypothesis," a theory against which they may wish to check their findings.

Against these positive considerations must be set some critical cautions. (1) The first duty of an excavator is to interpret the evidence objectively. It is one thing to correlate and adjust dates for more or less similar findings in a relatively limited and homogeneous area, as was done for the Early and Middle Helladic periods of Greece by Wace and Blegen. It is something else to conjecture and surmise gaps and destruction levels over a vast and highly diversified geographical area—particularly when such gaps and destructions have not been observed by the excavators. Cities are subject to general catastrophes, but they also have their individual fortunes. What would a history be like which tried to correlate the destructions of Athens, Sparta, Carthage, and Rome? (2) Throughout the book, Schaeffer uses the stratigraphic sequence at Ras Shamra as unassailably valid.¹⁹ On his map, Ras Shamra appears in capital letters, all other sites in smaller type, and that reflects very accurately the author's point of view. On such reasoning, any competent excavator could proceed to set up a different comparative stratigraphy by using his site as the yardstick to which all other sites must conform. It is true that in the initial stages of research, one site has often to stand for an entire area simply because it is the only one sufficiently known, but this is not the situation in Syria and Palestine. It is doubtful, in fact, whether any site in Syria or Palestine can qualify as the supreme standard for the sequence of events in Central and Western Asia Minor, Iran, and Caucasus. (3) Within the more limited sphere, which we may call Eastern Mediter-

rannean—Cilicia, Syria, Palestine, Cyprus, and North Mesopotamia—Ras Shamra has a serious claim to be considered a key site. With thirteen campaigns completed and one eighth of the total area excavated, it is one of the more extensively excavated sites and it affords the combination of a stratigraphic sequence with datable literate material. Whether Ras Shamra affords the best combination of archaeological and historical (as distinct from literary) material, is something this reviewer is not competent to judge, but the question should be raised whether Ras Shamra affords the best stratigraphic sequence. The site is still in process of excavation²⁰ and no final report is available.²¹ Schaeffer states that the subdivisions of the Late Bronze Age (Ugarit I; 1, 2, 3) as well as those of Middle Bronze Age (Ugarit II; 1, 2, 3) were established in the last two campaigns before the war. As evidence for his sequence he presents three stratigraphic sections (15 ff.), which are substantially sequences of tombs. In some cases these tombs were associated with dwellings; in others they were not. Taken by themselves, these sections can hardly be termed comprehensive evidence. Furthermore, "stratified" sequences of tombs are precarious witnesses. A cemetery is apt to have a "rhythm of life" different from habitations, and, as Schaeffer repeatedly demonstrates, tombs are subject to unpredictable re-use. The reviewer does not wish to cast doubt on Schaeffer's interpretation of his sections, but would remind the reader that the evidence presented for the Ras Shamra sequence is limited and that nowhere in the book is there a precise account of the extent to which Middle and Early Bronze Age levels have been uncovered.²² (4) A final difficulty is inherent in the subject of comparative stratigraphy. Schaeffer includes in his discussion a number of small digs and soundings which cannot afford conclusive evidence. In other instances, the reporting has been of such nature that Schaeffer finds himself compelled to caution the reader that more information is needed before the sequence can be evaluated. Finally, some sites used by Schaeffer with confidence on the basis of preliminary reports, may appear in a different light in the final publications some of which are impending or forthcoming (Troy, Tarsus, Amuq). The book would have gained by omission of some of the uncertain or inconclusive evidence.

The chronological system proposed by Schaeffer for the Bronze Age of the Near East has an appealing triadic simplicity. This tripartite division is modelled upon the Minoan and the Helladic sequences. Prospective users of the book will do well to remember that Schaeffer's periods have dual names, one derived from the general division of the Bronze Age and the other from his own stratification at Ras Shamra. Thus:

- Ras Shamra III, 1 = Early Bronze 1 (no dates given).
 Ras Shamra III, 2 = Early Bronze 2, 2400?-2300 B.C.
 Ras Shamra III, 3 = Early Bronze 3, 2300-2100 B.C.
 Ras Shamra II, 1 = Middle Bronze 1, 2100-1900 B.C.
 Ras Shamra II, 2 = Middle Bronze 2, 1900-1750 (1700) B.C.
 Ras Shamra II, 3 = Middle Bronze 3, 1750-1600 B.C.
 Ras Shamra I, 1 = Late Bronze 1, 1600-1450 B.C.
 Ras Shamra I, 2 = Late Bronze 2, 1450-1350 (1365) B.C.
 Ras Shamra I, 3 = Late Bronze 3, 1350-1200 B.C.²³

How well is this system founded? We have already spoken about the problem of destructions, which are used by Schaeffer to define all periods with the exception of the boundary between Middle Bronze 2 and Middle Bronze 3. But even without the destructions there is important substantiating evidence from Ras Shamra for the dating of Middle Bronze 1 and 2, evidence which establishes correlations with the Egyptian and Mesopotamian (as well as with the Minoan) chronologies. For Middle Bronze 1, Schaeffer reports the discovery of a necklace bead with the cartouche of Sesostris I (1970-1936 B.C.). For Middle Bronze 2, Ras Shamra has produced a number of Egyptian monuments ranging from the reign of Sesostris II (1908-1888 B.C.) through that of Amenemhat III (1850-1790 B.C.). Schaeffer assumes that the Egyptian influence upon Ras Shamra lasted until the beginning of the Thirteenth Dynasty in Egypt. Then, about 1750-1730 B.C., there was an anti-Egyptian reaction, in which Egyptian monuments were systematically destroyed or effaced. The author also introduces an important new correlation between the Twelfth Dynasty in Egypt and the Middle Minoan II period in Crete: some Minoan vases of "egg-shell" and Kamares types²⁴ were found in the same levels as the Egyptian statue of a wife of Sesostris II (1908-188 B.C.) and the sphinxes of Amenemhat III (1850-1790 B.C.).²⁵ A correlation with the Babylonian chronology is provided for the same period (MB 2) by cylinder seals with inscriptions attributable to the period of Hammurabi.²⁶ These were found in sub-levels of Middle Bronze 2 which were *later* than those of the dated Egyptian monuments of the Middle Kingdom, i.e., later than 1790 B.C. On the other hand, a haematite cylinder found in Tomb LVII (31, fig. 5) and believed by Schaeffer to belong to the reign of Hammurabi was found together with

objects of the Egyptian Middle Kingdom and with Syrian vases datable to the times of Amenemhat III and IV (1850-1792 or 1777). Now the inscribed seals would seem to favor the "low" Hammurabi date of Albright (1728-1686 B.C.) as by stratification they are later than 1790 B.C., but Schaeffer attributes a decisive significance to the haematite cylinder and argues that the finding of this cylinder with objects of Egyptian Middle Kingdom shows Hammurabi to be a contemporary of the last rulers of the Twelfth Dynasty; an argument which would work in favor of Sidney Smith's Hammurabi date of 1792-1750 B.C. As only the central scene of the cylinder is reproduced in an outline drawing, we shall have to await the promised publication before we can decide the value of this piece for the most hotly contested issue of Near Eastern chronology.²⁷

Of the periods belonging to the Late Bronze Age of Ras Shamra, Period 1 has apparently no important historical material; Periods 2 and 3 have yielded a wealth of written documents. King Nqmd of Ugarit (Ras Shamra) active in Period 2 was a contemporary of the Egyptian rulers Amenophis III and IV (1405-1352 B.C.). Whether one prefers to start this period with a natural catastrophe of ca. 1450 B.C. or with the conquest of Ugarit (Ras Shamra) by Amenophis II (1444 B.C.) is almost a matter of taste.²⁸ Similarly, whether the destruction of Ugarit described in a letter of Abimilki of Tyre to Amenophis IV was caused by an earthquake or by some other event,²⁹ it constitutes historical evidence for a destruction between 1370 and 1360 (1355) B.C. which can be plausibly equated with the end of Late Bronze 2 period in Ras Shamra, though not necessarily elsewhere. The last period of Ras Shamra, Late Bronze 3, is less securely defined. It has yielded scarabs of the Nineteenth Dynasty and vases with the cartouche of Rameses II (1292-1232 B.C.); but the final destruction of the city is difficult to date. Although Schaeffer remarks once (9, n. 4) that "*la date est encore problématique*" and uses 1200 B.C. in his charts as the final date for Ras Shamra, elsewhere (39) he seems to prefer a date around 1250 B.C. There is apparently no evidence available which would determine whether the earlier or the later incursions of the Land and Sea Peoples caused the downfall of the city.³⁰ So much for the support which Schaeffer's chronology derives from historical evidence.

Other dates of Schaeffer's system rest largely upon typological comparisons, especially comparisons of pottery and metal work. In general, Schaeffer operates on the assumption that typological similarity proves similarity of date. Within broad limits, this is a natural and justified assumption, but unlike dated written evidence typological similarity is a flexible notion: objects may be described as similar when they

are nearly identical or when they have only a very generic resemblance. Beyond that, any statement about the length of time in which "similar" vases, pins, and daggers were used, can be at best a reasonable guess. We can quote from historical epochs many a discouraging example of persistence of implements, arms, and even ornaments over long periods of time. Ultimately, typological sequences are dependent on historical evidence, and their usefulness depends on the manner in which historical and typological evidence is correlated. One example may illustrate the difficulties of evaluating typological comparisons. The "Khirbet Kerak Ware"³¹ is used by Schaeffer as one of the distinctive criteria for his Period 3 of the Early Bronze Age. According to his interpretation, it was found at Ras Shamra in the level designated as EB 3, under a destruction level of ashes.³² On the speculative assumption that this destruction might be part of an Asiatic invasion³³ which (subsequently?) uprooted the Sixth Dynasty in Egypt (dated here about 2300 B.C., with Scharff and Vandier-Drioton), Schaeffer assigns to the Khirbet Kerak Ware a range between 2400–2200 B.C. He then uses its occurrence at other Syrian and Palestinian sites to lower the dates given by the excavators.³⁴

Since the time that Schaeffer wrote his account, more has become known about the Khirbet Kerak ware. In Syria, its occurrence is fixed by the Amuq (Antioch Plain) Phase "H" (same as "Jedeideh XI"), which in turn is dated by the seals of the Early Dynastic Age in Mesopotamia,³⁵ while in Palestine the Khirbet Kerak Ware is dated in "Early Bronze III", corresponding to the Third to Fifth Dynasties in Egypt.³⁶ If we accept Schaeffer's correlation at Ugarit, we are faced with the strange fact that the same ware appears in Syria once early (EB 2, Amuq), once late (EB 3, Ras Shamra-Ugarit). Actually, the Mesopotamian and the Egyptian correlations seem to show that the ware first appeared in Syria in EB 2 and subsequently in Palestine. There may be all sorts of explanations for the dilemma, but it is difficult to escape the conclusion that the Khirbet Kerak ware (and with it much of the EB 3 phase in Schaeffer's system) must be moved upward.³⁷

This example was taken from the Early Bronze Age where the picture is still far from clear and caution in assigning absolute dates is indicated. But there is another aspect of Schaeffer's chronological system which is not likely to go unchallenged.³⁸ Time and again he raises dates for Late Bronze Age levels in order to achieve equations of destructions at other sites with his Ugarit earthquake of 1365 (e.g. Troy, Tarsus, Hama). This in turn leaves him with a vacuum between 1365 and 1200 B.C. As a result, much of the material which properly belongs in the twelfth and even the eleventh centuries is sucked into

the void. The Iron Age cemeteries of Hama are a typical example. For a while, this reviewer suspected that Schaeffer had also raised the dates of his own Mycenaean material from Ras Shamra, but the rich series of vases and sherds attributed in *Ugaritica* II to the years 1365–1200 B.C. dispelled this suspicion. The trouble arises at other sites. Some of it seems to be caused by purely verbal discrepancies of terminology as, for example, in Schaeffer's re-dating of the Late Bronze and Early Iron Age periods in Cyprus,³⁹ but in other cases there is a real difference of opinion. In the Eastern Mediterranean, Schaeffer does not admit the existence of any Mycenaean vases later than 1200 B.C. Yet, if we attribute the late Mycenaean vases at Tarsus and Mersin to the people who destroyed the "Hittite" phases of these sites, we must date the vases in the first half of the twelfth century. Schaeffer does not specifically comment on those wares which are beginning to emerge as characteristic of the Dark Ages in the Eastern Mediterranean, wares which are in some degree derived from Late Mycenaean and seem to run parallel to the "Transitional," the Submycenaean, and the Proto-Geometric phases in Greece: Philistine, Proto-White Painted of Cyprus, and the painted ware of Amuq (Antioch Plain) Phase "N." It looks as if they would be forced upward by his dating system. Ultimately, the trouble lies in Schaeffer's assumption that the "Granary Style" of Mycenaean pottery should be dated in the thirteenth century. If we use this assumption at Mycenae, we must re-date the Dorian invasion. Thus, by implication, Schaeffer's system brings us into a head-on collision with the entire frame-work of Greek history from 1250–900 B.C. We must admit that there is nothing sacrosanct about the present views concerning the sequence of archaeological material and the dating of events in the Late Mycenaean and the Submycenaean ages. But the present chronological system of Mycenaean pottery⁴⁰ has the virtue of reconciling archaeological data with "mythological history" as told by the Greeks, and it enables us to utilize some reasonable chronological guesses made by the Greek historians, such as Eratosthenes' date of 1184 B.C. for the Fall of Troy. The agreement of archaeological sequences with the mythological tradition is rather striking. It accounts for the two main waves of the Dorian invasion (Return of the Heraclidae), one in the thirteenth and another in the twelfth century; the second was successful in the Peloponnese (ca. 1150 B.C., destruction of Mycenae⁴¹) but not in Athens.⁴² The current Mycenaean chronology provides a reasonable explanation and satisfactory dating for the cessation of Mycenaean cemeteries of Rhodes and Crete, which were conquered by the Dorians. Furthermore, it is supported, at least in part, by the agreement of mytho-

logical history with the linguistic facts such as the distribution of Greek dialects. Were this a matter of surrendering the present chronology of Mycenaean pottery in favor of new historical evidence, we should not hesitate. For Greek legends and dates given by Greek historians for that pre-alphabetic period are not historical evidence in the same sense as the contemporary datable records of Merneptah and Rameses VI about the invasions of the late thirteenth and early twelfth century.⁴³ But Schaeffer has no new clues to offer. The exact date of the destruction of Ras Shamra is a matter of conjecture within fairly wide limits (1250-1175 B.C.), and when it comes to the dating of Mycenaean pottery, it is Schaeffer's word against that of pottery specialists. If Schaeffer had been compelled to deal at Ugarit with the problems of the period from 1200-900 B.C., he would have seen that Mycenaean pottery continued for at least another half-century and that in Greece sites like Athens, where continuity of habitation was unbroken, provide a check on the manner in which Mycenaean developed into Proto-Geometric.⁴⁴

It would not surprise this reviewer if some scholars do not take kindly to Schaeffer's suggestion that Syria, Palestine, and the neighboring countries were stricken by poverty and degradation in the time between 1600 (1550) and 1450 B.C. The prevalent view is colored, to be sure, by the Egyptian sources and the simultaneous prosperity of Crete. Still, it is not only the Keftiu who bring luxurious presents in wall paintings of Egyptian tombs, but also the Syrians,⁴⁵ and the 924 chariots wrought with gold and the two hundred suits of bronze armor taken by Tutmosis III at Armageddon (1468 B.C.) should have taken more than one generation to accumulate in the armories of the kings of Kadesh and Megiddo.⁴⁶

Finally, a word of caution must be added regarding the so-called "absolute" dates. Because the Near East is so vital for the chronologies of the European, Central Asiatic, and possibly even Far Eastern areas, it is well to remind ourselves from time to time that the two great pillars of the chronology of the Bronze Age, the Egyptian and the Mesopotamian, are not two stout towers resting on immovable foundations.⁴⁷ They may rather be likened to two buoys linked by a chain and anchored, to be sure, yet raised or lowered by the waves of the sea. Both chronologies include problems which cannot as yet be solved except by reasonable guesses—the specific years to which observed astronomic data should be assigned, the estimates for the lengths of obscure periods, and the evaluation of possible gaps, duplications, and exaggerations in Royal lists and building inscriptions.⁴⁸

The exact chronological correlation of Egypt and Mesopotamia, too, is far from precise in the third millennium⁴⁹ and is not secure in details for the time

before 1400 B.C. It is, however, certain that if scientific excavations continue in Palestine, Phoenicia, Syria, and North Mesopotamia, we shall learn more and more about local dynasties and rulers, as has already happened in Byblos, Ugarit, Alalakh, Mari, and Tell Brak. These, in turn, will eventually provide correlations with dated rulers in Egypt and Mesopotamia and thus will help to anchor more securely the entire chronology of the Near East.

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(To be concluded in the next issue)

¹ *Stratigraphie comparée et Chronologie de l'Asie Occidentale* (III^e et II^e Millénaires), Syrie, Palestine, Asie Mineure, Chypre, Perse et Caucase. Pp. xiii + 653, figs. 324, pls. 70, 10 charts, 1 map. Published on behalf of the Griffith Institute, Ashmolean Museum, Oxford. London, Geoffrey Cumberlege, Oxford University Press. 1948. 84 shillings.

² Only the first part, including the major Mesopotamian sites and Susa, was completed when the author died. Cf. *Excavations in Mesopotamia and Western Iran, Sites of 4000-500 B.C. Graphic Analyses* by Henry Ware Eliot, Jr. Special Publication of the Peabody Museum of American Archaeology and Ethnology, Harvard University (Cambridge, Mass. 1950).

³ A. D. Trendall, J. R. Stewart, and Eilers, *Handbook to the Nicholson Museum* (Sidney 1948). A conscientious record of the earlier phase of discoveries was provided by G. Contenau, *Manuel d'archéologie orientale I-III* (Paris, 1927-1931), brought partly up to date in vol. IV (1947). H. J. Kantor "The Early Relations of Egypt with Asia," *JNES* 1 (1942) 174 ff. and A. L. Perkins, *The Comparative Archaeology of Early Mesopotamia* (Chicago 1949) are concerned with periods earlier than those treated by Schaeffer.

⁴ Typological attempt to define groups of Bronze Age pottery within Schaeffer's area: M. Welker, "The Painted Pottery of the Near East in the Second Millennium," *Transactions Amer. Philosoph. Soc.* NS 38 (Philadelphia 1948) II. R. Maxwell-Hyslop, "Daggers and Swords of Western Asia," *Iraq* 8 (1946) 1-64, deals with another group of objects which figure importantly in Schaeffer's arguments.

⁵ These studies will be referred to in the second part of the article. For the relations to the Aegean, which enter prominently into Schaeffer's account, cf. the recent publications by H. J. Kantor, "The Aegean and the Orient in the Second Millennium B.C.," *AJA* 51 (1947) esp. 76 ff.; P. Demargne, *La Crète Dédalique* (Paris 1947); F. Matz, "Die Aegeis," *Handbuch der Archäologie* I, Part 4 (1949) 180, 211 ff., 230 ff.; *Historia* 1 (1950) 174 ff.; M. P. Nilsson, *The Minoan-Mycenaean Religion* (Lund 1950) 372 ff.; and H. L. Lorimer, *Homer and the Monuments* (London 1950) 52 ff.

⁶ *Alalakh and Chronology* (London 1940); "Middle Minoan I-II and the Babylonian Chronology," *AJA* 49 (1945) 1 ff. "The Statue of Idrimi," *Public. Brit. Institute of Archaeology at Ankara* 1 (London 1949).

⁷ Albright's reports and articles are well-nigh countless. Among those in which he correlates philological and archaeological aspects of chronology are: *BASOR* 88 (1942) 28 ff.; 99 (1945) 9 ff.; 118 (1950) 14 ff.; *AJA* 54 (1950) 162 ff. A similar low chronology is advocated by Cornelius, *Klio* 35 (1943) 1-16. For some new facts cf. M. B. Rowton, *Iraq* 8 (1946) 94 ff. and *JEA* 34 (1948) 67 ff.

⁸ As G. F. Swift, Jr. emphasizes in a note to the reviewer. The most recent comprehensive treatments with the traditional emphasis on Mesopotamia are by V. Christian, *Altertumskunde des Zweistromlandes I* (Leipzig 1940) and by A. Parrot, *Archéologie mésopotamienne I* (Paris 1946); both are in progress, neither has as yet reached the period with which Schaeffer is primarily concerned.

⁹ Only six are mentioned in the text (563), but there seem to be seven in the charts.

¹⁰ On the other hand, Mallowan, *Iraq* 9 (1947) 19, has contended that thorough destructions of cities were rare and intended as terrifying examples. The normal procedure, according to him, was to spare the urban populations who produced negotiable products, "the goose that laid the golden eggs."

¹¹ R. C. Thompson, "A New Record of An Assyrian Earthquake," *Iraq* 4 (1937) 186-189; quoted by Schaeffer, 255, n. 5.

¹² Cf., for example, M. A. Beek, "Ein Erdbeben wird zum prophetischen Erlebnis," *Archiv Orientalni* 17 (1949) 31 ff., an earthquake about 750 B.C., in which Moab suffered but Jerusalem was spared.

¹³ Thompson, *loc. cit.*, lists one about 1280 B.C., another about 1187-1150 B.C., a third in 655 B.C., all in Assyria.

¹⁴ J. A. Knudtzon, *Die El Amarna Tafeln* (Leipzig 1915) 625. C. F. A. Schaeffer, *The Cuneiform Texts of Ras Shamra* (London 1939). W. F. Albright, *AJA* 54 (1950) 164, n. 5, lowers the date of this earthquake to 1360-1355 B.C. It should be noted, however, that both the interpretation of the text and the archaeological evidence for the earthquake at Ugarit have been questioned by M. Dunand, "Stratigraphie et chronologie des sites archéologiques du Proche-Orient" *RA* 36 (1950) 7 f.

¹⁵ I am indebted to L. D. Leet of the Geology Department of Harvard University for his willingness to enlighten me about the seismological problems involved. Professor Leet remarks that much longer spans of time than four thousand years would be required for any substantial changes in seismic intensity. He refers for modern methods and records to B. Gutenberg and C. F. Richter, *Seismicity of the Earth* (Princeton 1950).

¹⁶ *Iraq* 9 (1947) 11 ff. We may expect some indication of the fauna and flora in this period from the systematic collection of pertinent material at Troy. Cf. C. Blegen, *Troy I* (Princeton 1950) pp. viii, 21. For the questions of earthquakes and climatic variations in Asia Minor, cf. also F. Chaput, *Phrygie, Géologie physique* (Paris 1941) 78 f., 119 f. A modern scientific method for determining Prehistoric temperatures has been developed by Dr. H. C. Urey. It is based on the fact that the relation among the three stable isotopes of oxygen in the carbonate structures of living beings is a function of temperature. It has

been successfully used on fossilized remains. Cf. *The Johns Hopkins Magazine* 2 (1950) 26.

¹⁷ A number of causes have been mentioned as decisive for the fate of civilizations of the Near East. In a very illuminating article on objectives for a history of the ancient Near East, W. Otto had suggested that it was determined by the "law of the eternal battle of nomads or nomadized peoples against the 'settled' civilizations." *SB Bayer. Akad.* 1941, II, Fasc. 3, p. 16. I owe the knowledge of this article to the generosity of Mrs. W. Otto. On the connection of peaceful maritime trade in the Mediterranean and prosperity of Near Eastern civilizations cf. Hanfmann, *AJA* 51 (1947) 327 f.

¹⁸ It is instructive to compare Schaeffer's discussion of Asia Minor with K. Bittel's attempt to write an archaeological history of Asia Minor, *Grundzüge der Geschichte Kleinasien* (Tübingen 1950).

¹⁹ A review article by M. Dunand, *RA* 36 (1950) 5-23, contains a critical, perhaps an overly critical discussion of the stratigraphic data presented by Schaeffer for Ugarit.

²⁰ Cf. *AJA* 54 (1950) 61, for the campaign of 1948.

²¹ Schaeffer (37) refers to a book in preparation. Preliminary reports and articles are numerous. They are listed in Schaeffer's *Ugaritica I* (Paris 1939) and II (Paris 1949) in *Bibliothèque Archéologique et Historique*, Haut Commissariat de Syrie and Institut Français d'Archéologie de Beyrouth, respectively. The most detailed statement to date is to be found in *Ugaritica I*, with small plan (as of 1937) in fig. 40, and an airplane view of the site in pl. 20. That one eighth of the mound has been explored (but only at Late Bronze Age level) is stated *ibid.* 52 f.

²² Schaeffer (225) remarks that his Early Bronze 2 and 3 are "non jusqu'ici été explorées qu'à l'aide de sondages d'étendue restreinte. Nous ne connaissons donc leur caractère archéologique que fort incomplètement." For these soundings cf. *Ugaritica I*, 3 f. In *Ugaritica II*, 71 f., 86 f., the author revises some of his earlier views and states that erosion had brought Middle Bronze levels very close to the surface near the temple of Baal. In *Ugaritica I*, 25 f., he briefly alludes to a quarter of Middle Bronze habitations and on pp. 15 ff., fig. 9, indicates the places, where objects of the Middle Kingdom period were found. M. Dunand, *RA* 36 (1950) 9 f., apparently doubts that any Middle Bronze houses have been found.

²³ A. Perkins, *JAOS* 70 (1950) 52 f., would lower Schaeffer's date for Ras Shamra II, 2 from 1900-1750 to 1750-1500 B.C. and reduce his Ras Shamra II, 3 and I, 1 phases (1750-1450) to a period of fifty years, 1500-1450 B.C. M. Dunand, *loc. cit.*, suggests that there is a gap before the Khirbet Kerak phase (EB 2?); on the other hand, he suggests that there is no gap of any consequence between the Middle Bronze 2 phase and the end of the city.

²⁴ Schaeffer (16) mentions some new examples in addition to those cited in the preliminary reports. Cf. also *Ugaritica I*, 54 ff. and II, 251, figs. 109 and 109 A, and S. Smith, *AJA* 49 (1945) 4 f. One wonders whether it is perhaps in this period that we must look for the beginnings of the tradition which associated Koshar-wa-Hasis,

the craftsman god of the Ugaritic pantheon, with Crete and with Egypt. Cf. Th. H. Gaster, *Thespis; Ritual, Myth and Drama in the Ancient Near East* (New York 1950) 155 f., 280. For the famous references to Cretan objects in the Mari archives, cf. G. Dossin, *Syria* 20 (1939) 111 f.; one of the items was sent to Hammurabi of Babylon. On Near Eastern objects imported into Crete cf. the list given by M. P. Nilsson, *The Minoan-Mycenaean Religion*² (Lund 1950) 385, n. 60, and the other studies quoted in n. 5, *supra*.

²⁸ Schaeffer (29, n. 3) regards the Egyptain monuments of Ugarit as signs of the "diplomatic expansion" of Egypt under the Twelfth Dynasty. In this connection, he interprets the Egyptian statuettes found at Kurigin Kaleh and Boğazköy (according to an oral communication of K. Bittel) as Egyptian presents sent to rulers in Asia Minor. To these should be added a statue found in Adana, now in the Metropolitan Museum, New York, which has been pointed out to the reviewer by W. S. Smith. Cf. *BMMA* 16 (1921) 208-210. A. Perkins, *JAOS* 70 (1950) 52, summarily rejects any correlation of the datable Egyptian monuments with Schaeffer's Middle Bronze 2; Dunand, *RA* 36 (1950) 11 ff. eliminates the Minoan Kamares sherd and the Amenemhat sphinx as unstratified; both apparently pursue the same aim of getting some objects of Schaeffer's MB 2 into his MB 3. They may be right in their typological comparisons, but this reviewer is not quite convinced by this disposal of inconvenient evidence.

²⁹ Schaeffer quotes F. Thureau-Dangin and E. Forrer, *Syria* 17 (1936) 124, and 18 (1937) 155.

³⁰ As C. Nestmann, from whose discussion I have benefited, observes, it would be difficult to date the seal with any assurance from the present publication. A complete one is promised in a special volume on Ugaritic Seals. If I understand the passage correctly, Schaeffer first quotes H. Frankfort, *Cylinder Seals* (London 1939) 146 ff., for the opinion that such seals cannot be safely dated in the reign of Hammurabi, then proceeds to attribute the seal to this reign for two reasons: first, because it shows an *ankh*, which according to Schaeffer would not be used in Ugarit after the anti-Egyptain reaction of 1750 or 1730 B.C.; and second, because the haematite seal is, according to Schaeffer, in the same style as the seal found in the tholos "B" tomb of Platanos in Crete. S. Smith, *AJA* 49 (1945) 14 ff., made the Platanos tomb important evidence for the correlation of the Mesopotamian and the Aegean chronologies, through this cylinder seal of the Hammurabi period. Smith's correlation has led F. Matz to re-examine the contents of the Platanos tomb in detail; he arrives at the conclusion that none of the objects in the tomb except the cylinder seal could be dated later than the early nineteenth century B.C. (Middle Minoan I). Since he accepts the "low" Hammurabi date, he is driven to the rather desperate suggestion that the seal penetrated into the tomb long after the burials were made; cf. *Historia* 1 (1950) 175 ff. Actually, his difficulty might be resolved; Thureau-Dangin's "high" date for Hammurabi would permit the cylinder seal to rejoin the other objects in the tomb. However that may be, the Ugarit tomb with the haematite seal (LVII) will be of importance for Aegean chronology as it also contained imitations of

Cretan vases; cf. H. Kantor, *AJA* 51 (1947) 19. The date for the accession of Hammurabi which is crucial for Near Eastern archaeology, was given as 1850 B.C. by F. Thureau-Dangin (Schaeffer, 30, n. 3), 1792 B.C. by S. Smith, and 1728 B.C. by W. F. Albright.

³¹ Although Schaeffer is very determined in applying the dates of his 1450 and 1365 B.C. destructions to other sites, he ponders at times (311) whether the fortifications of Ugarit were destroyed in 1444 B.C. by Amenophis II or in 1365 B.C. by an earthquake.

³² Cf. n. 14, *supra*.

³³ Cf. J. Stewart in A. D. Trendall, *Handbook to the Nicholson Museum*² (Sidney 1948) 170, with references to earlier articles by Schaeffer in which he placed the destruction in the early twelfth century B.C. W. F. Albright, *AJA* 54 (1950) 170, places the destruction of Ugarit by invaders in the reign of Rameses VI, about 1175 B.C. M. Dunand, *RA* 36 (1950) 9, suggests that the city was not destroyed but gradually abandoned.

³⁴ Red and black burnished ware often plastically decorated. The name is derived from the site of Khirbet Kerak (Beth Yerah) on the Sea of Galilee. For the technique, cf. Y. Sukenik, *BASOR* 106 (1947) 9 ff.

³⁵ Schaeffer, 33 f., pl. XIII, 48. Dunand, *loc. cit.*, 20, 23, asserts that this level should be regarded as Early Bronze 2 not 3, because of the "Combed Ware" which was found together with the "Khirbet Kerak" bowls.

³⁶ There seems to be a general feeling that the origin of the "Khirbet Kerak Ware" must be looked for in Anatolia. Schaeffer (34, n. 1) says that bowls identical with the Khirbet Kerak Ware came from Ahlatlibel and the tomb "TM" of Alaca Hüyük; T. Özgüç (at an archaeological conference of the University of Ankara, 1947) also raised the question of the relation of Anatolian burnished wares to the Khirbet Kerak Ware. M. Mellink, who very kindly discussed the question with the reviewer, stated that she was doubtful about the parallels at the sites quoted by Schaeffer; she has seen, however, vases of the Anatolian "Early Copper Age" (roughly equivalent of EB 2) from Eastern Anatolian sites (Erzincan) which resemble the Khirbet Kerak Ware.

³⁷ Schaeffer, 41 f., Qalaat-er-Rouss, Syria, Levels 7-8; Schaeffer, 109, Hama, Level K; Schaeffer, 131, 189 ff., cf. 213, n. 1, Early Jericho Level III; Beisan, levels XI B-XII, Palestine. M. Welker, *Transactions Amer. Philos. Soc.* NS. 38 (Philadelphia 1948) II, 193 f., 196, 200 f., arrives at dates even lower than those of Schaeffer. By a circuitous route involving comparisons at third remove (Khirbet Kerak Ware to vases from Hypogaeum at Tell Ahmar to pottery of Chagar Bazar 2), she obtains for the Khirbet Kerak Ware a dating of 2070-1960 B.C. The occurrence of objects of the Pyramid Age of Egypt in the same levels at Beisan (XI-XII) apparently induces her to lower the entire Old Kingdom period of Egypt to somewhere around 2000 B.C. She dates in the same period Level XVIII at Megiddo, where two Khirbet Kerak sherds were found. Cf. G. Loud, *Megiddo II* (Chicago 1948) pls. 106:8 and 107:28, and Albright's comment, *AJA* 53 (1949) 214, "the stratum must have come to an end . . . about the twenty-seventh century", and also G. E. Wright, *JAOS* 70 (1950) 58.

³⁵ R. J. Braidwood, "Mounds in the Plain of Antioch," *OIP* 48 (Chicago 1937) 7. Cf. W. F. Albright, *Archaeology of Palestine* (London 1949) 76 f. Braidwood's dates for the period, 3000–2600 B.C., reflect a system of Egyptian chronology which is "higher" than that of Albright. Cf. Albright's table, *BASOR* 88 (1942) 33. On the chronological system used by Schaeffer, the lowest possible date should be 2400 B.C.

³⁶ Albright, *op. cit.*, specifies that the ware appears earlier in Syria and later in Palestine, where it has a shorter duration, ca. 2600–2400 B.C. He seems to think of "Khîrbet Kerak" ware as of a popular technique which was being imitated in different regions. Cf. *BASOR* 106 (1947) 17, n. M. Mellink comments that the Khîrbet Kerak phase is not necessarily a long one and that it makes a sudden and strong appearance in the Antioch Plain. She suggests tentatively a duration of ca. 2800–2500 B.C. for Syria, and 2700–2500 B.C. for Palestine (following a chronological system about one hundred years higher than Albright's). Like Dunand, *loc. cit.*, she points out that there may be a gap (Early Bronze 3) after the Khîrbet Kerak phase (Early Bronze 2) at some Syrian sites.

³⁷ W. S. Smith tells me that there are conclusive parallels for the Level J at Hama in the material of the Fifth and Sixth Dynasty period in Egypt. This in turn makes the preceding level Hama K earlier than is assumed by Schaeffer. The main difficulty in Schaeffer's dating of the Khîrbet Kerak Ware lies in the contradiction of evidence from two Syrian sites, Amuq (Antioch Plain) where it was found with Mesopotamian Early Dynastic objects, and Ugarit (Ras Shamra) where he dates it in the last phase of the Early Bronze Age. This difficulty would not be obviated, even if we adopted the lowest suggested dates for Egypt and Mesopotamia.

³⁸ On Schaeffer's chronology of the Middle Bronze periods cf. n. 23, *supra*, and for the alleged hiatus at the beginning of the Late Bronze Age, *infra*, next issue.

³⁹ Cf. C. F. A. Schaeffer, "Enkomi," *AJA* 52 (1948) 175 ff. E. Gjerstad, *Swedish Cyprus Expedition* (Stockholm 1948) IV, 2, pp. 421 ff. J. Stewart in A. D. Trendall, *Handbook to the Nicholson Museum*² (Sidney 1948) 168 ff. J. F. Daniel, *AJA* 52 (1948) 109. From Schaeffer's remarks, *loc. cit.*, 176, it appears clearly that he regards the Swedish archaeologists' "Late Cypriote III" as the same period as his "Cypriote Iron I." Cf. also *Stratigraphie*, 376 ff. and 606. A. Wace, *Mycenae* (Princeton 1949) 23, would probably accept Schaeffer's date of ca. 1200 B.C. for the end of the Bronze Age, but would place the very latest phase of Mycenaean in the Early Iron Age. The controversy about the relation of Mycenaean, "Transitional," and Sub-Mycenaean pottery to the definition of the border line between the Late Bronze and the Early Iron Age is well summarized by F. Matz, *Gnomon* 22 (1950) 121 f.

⁴⁰ Cf. A. Furumark, *The Chronology of Mycenaean Pottery* (Stockholm 1941); "The Mycenaean III C Pottery and Its Relation to Cypriote Fabrics," *Acta Instituti Romani Regni Sueciae* 10 (1944) 194 ff. See also J. F. Daniel, *AJA* 52 (1948) 107 ff. Although Schaeffer (606) includes a note by Furumark which gives an outline of Furumark's chronological system, he was unable to make

use of Furumark's work during the war, when the *Stratigraphie* was written (382, n. 1).

⁴¹ A. J. B. Wace, *Mycenae* (Princeton 1949) 22 ff.: "After the Trojan War came the collapse at the beginning of the Early Iron Age. Toward the end of the twelfth century, Mycenae was destroyed." He dates the late Bronze Age (LH III) 1400–1150 B.C. at Mycenae, and around 1100 B.C. elsewhere. On Furumark's system, the destruction of Mycenae occurred ca. 1150 B.C. Cf. F. Matz, *Gnomon* 22 (1950) 122.

⁴² O. Broneer, *AJA* 52 (1948) 113 f. K. Kübler and Kraiker, *Kerameikos I* (Berlin 1939). According to Furumark, *Chronology*, 28, the development was also unbroken at Asine.

⁴³ W. F. Albright, *AJA* 54 (1950) 166, 169 ff., is a recent discussion of the dates.

⁴⁴ Furumark, *Chronology* (1941) 29, 42, 61, classified the latest vases from Ras Shamra then known as Myc. III B, i.e. 1300–1230 B.C. and Albright, *loc. cit.*, 166, places the latest Mycenaean imports in Syria between 1240–1230 B.C. In the opinion of the reviewer, this does not apply to local imitations of the Mycenaean vases. Part of Schaeffer's troubles may arise from the fact that there are two phases in the Granary at Mycenae. Vases of the earlier phase (Wace's LH III B, fig. 75) may look similar to the latest Mycenaean vases found at Ras Shamra; those of the later (Wace's LH III C, "from the floors of the Granary extension," "Granary Class proper") do not. Cf. Wace, *op. cit.*, 132 f.

⁴⁵ Tombs of Senmut and Rekhmire, late sixteenth and early fifteenth century. Cf. H. Kantor, *AJA* 51 (1947) 43 ff., n. 123.

⁴⁶ G. E. Wright, *BiblArch* 13 (1950) 34.

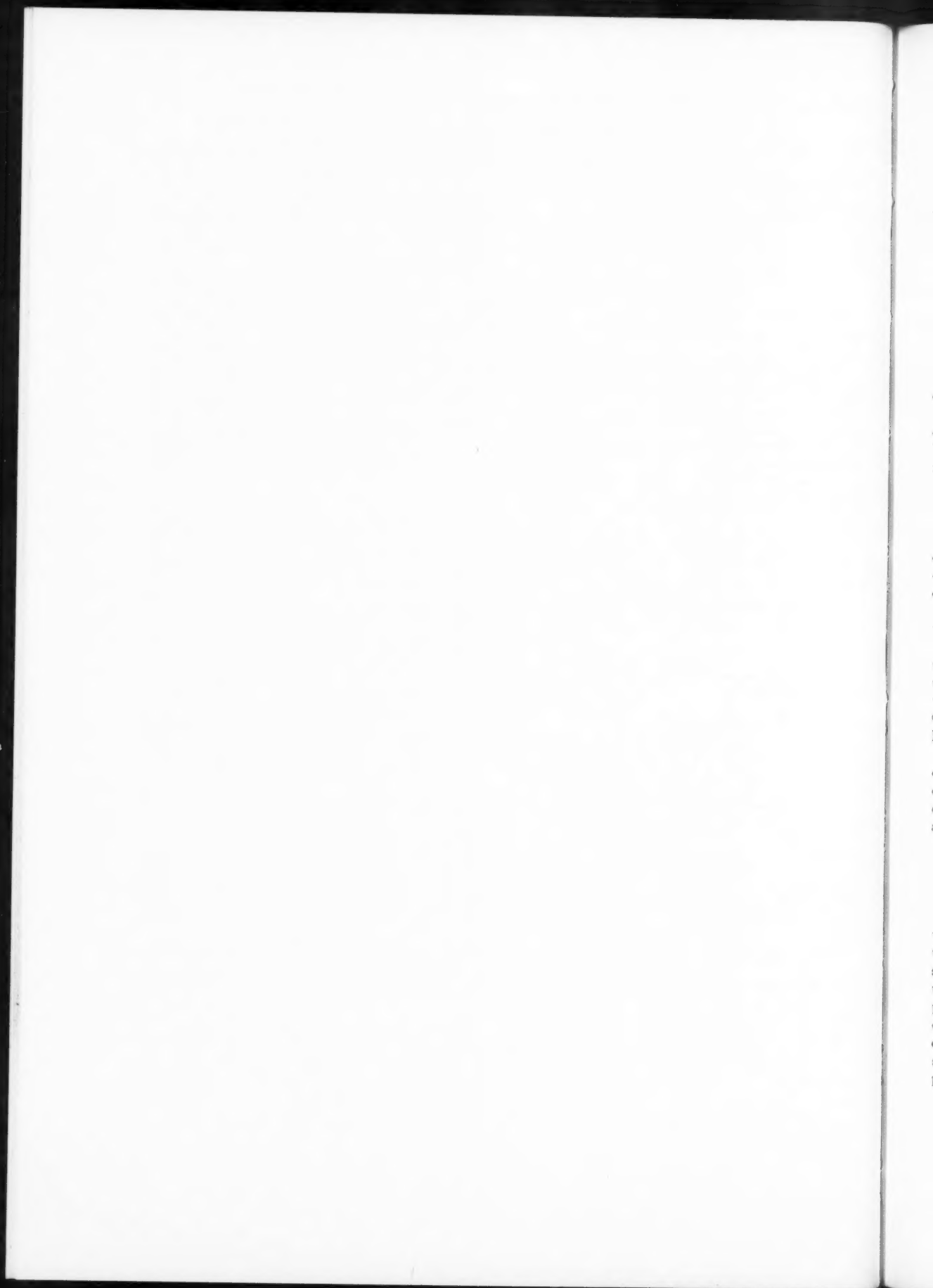
⁴⁷ Some basic reading in articles which discuss written evidence will go far toward curing archaeologists of their inclination to assign too definite dates to material on basis of "systems" in which there are still so many debatable points. Cf. in addition to the works of S. Smith and W. F. Albright quoted in nn. 6–7, *supra*, H. E. Winlock, "The Origin of the Ancient Egyptian Calendar," *Proceed. Amer. Philos. Soc.* 88 (1940) 447 ff.; A. Scharff, "Die Bedeutungslosigkeit des sogenannten ältesten Datums der Weltgeschichte," *Hist. Zeitschrift* 161 (1940) 3 ff., kindly lent to the reviewer by W. S. Smith; Richard A. Parker, *The Calendars of Ancient Egypt* (Chicago 1950). For the Near East: A. Poebel, "The Assyrian King List from Khorsabad," *JNES* 1 (1942) 247 ff., 461 ff. and the critique by S. Smith, *AJA* 49 (1945) 18 ff. Some German literature in W. Otto (n. 17, *supra*) 6 f. A new "low" system by E. O. Forrer is reprinted by Schaeffer, 607 f. Contrariwise, A. Goetze, to whom the reviewer is indebted for some helpful letters, authorizes the following opinion: "Although it is true that the former low chronology which placed the end of the Hammurapi dynasty at ca. 1750 B.C. must be revised downward, the dates which are now proposed for that event (Boehl ca. 1500 B.C.; Albright-Cornelius ca. 1550 B.C.; Ungnad-S. Smith 1595 B.C.) are in my opinion too low. The Khorsabad King list cannot be used as the sole basis for our calculations; as every other source, it must be subjected to a critical interpretation. With the various solutions just enumerated the point has been reached where the historical facts

known to us can no longer be accommodated without more or less force" (Nov. 2, 1950). Archaeology can advance chronology. Indeed, as Scharff points out, it was the archaeological material that compelled the downward revision of Egyptian chronology; but this advance was made through proof of continuity and correlation of cultures, not through assumption of gaps. Absolute dates for periods in which the continuity of written chronology breaks down, can be provided only by science. Until now the science which supplied such pegs for the Near East was astronomy; now physics, chemistry, and Carbon 14 may provide some surprises. Add A. Goetze, "The Problem of Chronology and Early Hittite History," *BASOR* 122 (April 1951) 18 ff.

⁴⁸ The reviewer is indebted to W. S. Smith for enlightening remarks about the exact character of doubtful issues in the Egyptian chronology. One of the crucial points is the length of Dynasties IX and X which has to be guessed in order to arrive at the final date of Dynasty VIII; from there one has to go 187 years to the beginning of Dynasty VI and 955 years to the beginning of Dynasty I. As Dynasties IX-X are contracted or expanded, the earlier Dynasties move up and down. In the Assyrian King list from Khorsabad, the first "absolute" date is

actually flexible, as the reigns of two kings are missing. Astronomic dates are the Sothic rises in Egypt and the Venus cycles in Mesopotamia. For possibly exaggerated dates the first two dynasties in Egypt are not above suspicion.

⁴⁹ This reviewer does not regard finds of Mesopotamian objects in Egypt as close chronological correlation of the same kind as that given by diplomatic correspondence of one king with another. Indirect correlation through Egyptian and Mesopotamian objects found together in Syria (as First Dynasty vases and Jemdet Nasr seals in Amuq Phase "G") or Syrian objects found in Egypt as well as in Mesopotamia is valuable but apt to allow considerable leeway in absolute dates. For example, types of pottery used perhaps for several hundred years may be dated by an Egyptian tomb of which the exact year of construction is known—but this date is only a fixed point in a line of unknown length. The situation is different, if the objects are dated by epigraphic and historical evidence, as in Albright's correlation of Hammurabi, Zimrilim of Mari, and Neferhatpe of Egypt through Phoenician objects with the name of Yantin-Ammu of Byblos: *BASOR* 99 (1945) 9 ff.



A PRELIMINARY REPORT ON SOME UNPUBLISHED MOSAICS IN HAGIA SOPHIA: SEASON OF 1950 OF THE BYZANTINE INSTITUTE

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PLATE 17

Despite the severe losses suffered during the spring and summer of 1950, first with the death of its President, Robert P. Blake, Professor of Byzantine History at Harvard University, and a little later of Professor Thomas Whittemore, its founder, Director, and moving spirit for so many years, the Byzantine Institute was nevertheless able to carry forward its work in Istanbul. From late July to early November work was conducted in three former churches now established as museums under the charge of the Ministry of Public Instruction of the Turkish Republic. In this campaign the same facilities, encouragement, and courtesies that had been afforded Professor Whittemore were graciously extended by the Turkish government to the author of this report.

While continuing the rehabilitation of the extensive mosaic cycles at the Kahrieh Djami (formerly the monastic church of St. Saviour in the Chora) which was begun in 1948, new work was undertaken at the Church of the Theotokos Pammakaristos (Fetiyeh Djami).

The subject of this report concerns the third project of the season: the investigation, preservation, and cleaning of some mosaic fragments in a large vaulted chamber which lies, as a second story, immediately above the entrance vestibule of the great church of Hagia Sophia (pl. 17). The room, whose floor is approximately at gallery level, can be entered at present only through the great doorway at the southern end of the axis of the West Gallery.

Above the door, inside the room, the semi-circular tympanum contains fragments of two of its original three figures in mosaic. Elsewhere in the room, at scattered points in the vaults, are fragments of fourteen other figures, many of them the merest bits and pieces, and all adhering to the masonry in a most precarious manner. These mosaics have never been covered with plaster or obscured by white-wash. They seem, however, to have been mentioned only twice in published works. The first is an allusion by Salzenberg to the mosaics above the door, without any identification of the figures, and a statement by the same author that the vaults were ornamented with mosaic figures,

one of which he illustrated in a drawing, again without identification.¹ The second is contained in a document published in 1902 by G. P. Beglery^{1a} in which a visitor to the galleries in 1847 claims to have seen a Deesis and full length figures of the Twelve Apostles. Today, of the fragments of sixteen figures it is possible to identify twelve, mostly by means of deciphering inscriptions in the plaster setting-bed.

The forms of the vaults and the irregular shape of the room are presented in the preliminary measured drawing reproduced in the accompanying plate (pl. 17).² Since the main purpose of the drawing is to present the mosaics in their true forms and dimensions and show their positions in the room, the longitudinal sections are drawn as though the rounded vaults were flat vertical planes that continue the vertical planes of the walls.³ Longitudinally the room is divided into three bays separated from one another by arches. The first bay, which contains no surviving mosaics, was originally a simple barrel-vault. Its eastern half seems subsequently to have been rendered somewhat irregular by later repairs. The second and third bays, while giving the effect of barrel-vaults, are slightly domed along the ridge, their bricks are laid in the manner of groin-vaults with the groins flattened out, and the walls below them penetrate vertically beyond the spring lines to form a lunette in each side of each bay, thus providing a total of four lunette penetrations. These two southern bays form a unit and together stand in contrast to the first. It will be seen that in their iconographic program the two southern bays were treated as a *continuum* and must have formed a unit within the program of the whole.

Adhering to the masonry are five patches of plaster, each containing smaller areas of mosaic tesserae. The first, in the tympanum at the northern end ("A" in plan and sections), contains two figures. The second (at "B") presents bits of four figures: the tip of a head which once came at the center of the arch separating the first two bays, the shoulders of two busts in the lunette of the second bay, and the foot and lower garments of a figure in a second zone above the traces of an ornamental band. The third patch (at "C") is

confined to the lunette in the East wall of the third or southern bay and contains fragments of three busts, two of them relatively well preserved. The fourth patch (at "D") is in the western lunette of the same bay, opposite "C", and has very small fragments from the heads of the three busts that once filled the lunette. The fifth patch is overhead between these last two. Although the drawing shows it in two parts, it is in reality one area of plaster which retains parts of four figures in mosaic, two in each of the two upper zones which met at the summit of the vault in an ornamental band that must have run the length of the two southern bays, if not of the whole room.

In the first area of plaster and mosaic ("A"), as in all others throughout the room, the actual mosaic tesserae survive only in the figures; almost without exception the gold cubes of the background have disappeared. It is evident that at some time the mosaics of this room were looted of all gold cubes, perhaps because of a need for them in repairs to the gold grounds of the vaults elsewhere in the building. As in Kilisse Djami in Istanbul, the cubes of the background seem to have been scraped off the setting-bed with some care, for apparently the attempt was made to spare the figures. The figures themselves have, of course, suffered mutilation and deterioration around the edges where little by little the cubes have dropped away.

The fact that so much remains of the setting-bed, that is, the layer of plaster into which the tesserae were inserted, has made it possible to reconstruct some lost details and to decipher many of the inscriptions. This is because of the fact that the setting-bed, as usual, was painted, before the cubes were inserted, as though the work were to be a fresco painting. All inscriptions were painted in black to serve as guidance to the mosaicist. Where the cubes have fallen out or been removed the underpainting supplies much information.

The lunette above the door, which is in process of consolidation and not yet cleaned of its scum of dirt and oily carbon deposits from smoke, now consists of two figures. The central figure of Christ, of monumental proportions (note, for example, the massiveness of the wrist and hand raised in blessing), is shown seated upon a throne. To His right stands the Mother of God, arms extended in supplication, while the figure that once stood to His left is completely gone, only a bit of the nimbus having survived in the setting-bed. The natural assumption would be that the composition was a Deesis of which only the Prodomos is missing. The correctness of this assumption would depend somewhat upon the date of the mosaic, and it is impossible to advance serious considerations for its dating, on stylistic grounds, until the necessary repairs and cleaning have been com-

pleted. In so far as it is possible at present to judge the style it is not incompatible with that of the late ninth century, a dating suggested by the content of other parts of the iconographic program of which this mosaic could well have been a part. If this is true, it cannot be taken for granted that the lunette contained a true Deesis.

From a study of the setting-bed on either side of the figure of Christ it is clear that the throne was of the type with a lyre-back similar to the one in the lunette above the imperial doors of the narthex of Hagia Sophia,⁴ a mosaic which seems, if we omit the kneeling Emperor, to have been of a type antecedent to the Deesis in that it represents the Mother of God and an archangel on either side of Christ in the medallions.

The second patch of plaster (at "B" in the drawing) retains only small areas in mosaic tesserae of two of the original three busts in the lunette and of the lower extremities of what was once a full length figure in an upper zone, while only the very top of the head and part of the nimbus, a crossed staff, and the incomplete inscription ΠΕΤ . . ., are preserved in the setting-bed, devoid of all cubes, to the left of the lunette. The first of a series of busts in the two southernmost bays was, therefore, ΠΕΤ[ΡΟΣ]. He carried a crossed staff over his left shoulder and was placed at the base of the arch between the first and second bays. The bust next to him, enframed with his two companions within a border that once curved up over the lunette and merged with the horizontal band separating the two zones, now has inscribed in the setting-bed to the left only the last three letters of δ ἄγιος. But the figure can be identified because it too carried a crossed staff. This must have been a portrait of the Apostle Andrew, elder brother of Peter and traditional founder of the See of Constantinople, because Byzantine iconography conferred the crossed staff only to Peter and Andrew among the twelve and, as will be made evident, all twelve Apostles were once ranged, six on either side, in the lower zones of the room. The third figure just to the right of Andrew and once the central one of three in the lunette, cannot be identified by name but must surely represent another of the Apostles. Only the left shoulder and the tip of the beard are preserved.

Above the horizontal band of ornament that connected the tops of the lunettes is an area of mosaic tesserae within a larger area of setting-bed. In mosaic a foot and the hem of a garment are easily recognized. Only by the closest observation of the setting-bed and in strong light does one become aware of the fact that this figure carried an open, inscribed, scroll. The left-hand part of the scroll remains, in the setting-bed, and this not to its full length. But the piece of scroll thus preserved contains forty-two characters which

make possible the identification of the text of the entire scroll as *Ezekiel* I, parts of verses 4 and 5: "And I looked, and, behold, a whirl-wind came out of the north . . . and a brightness was about it . . . the likeness of four living creatures." This is all that can be said at present about this figure—whether or not it identifies it as the prophet Ezekiel.

The third patch of plaster and mosaic is confined to the lunette on the eastern side of the third bay (at "C"). Assuming that a series of six Apostles occurred in the lower zone of this wall the first would have been Peter and the second Andrew. The third and fourth would have been Andrew's companions in the first lunette and the fifth would have been in the spandrel between the two lunettes. The sixth, and last, should therefore be the massive bust that occupies first position on the left in this second lunette. The inscription in the setting-bed on either side of this bust proves this arrangement to be correct. Along the curvature to the left of the figure one is able to decipher, first an *alpha* within an *omicron*, which is the monogram for $\delta \acute{\alpha}\gamma\iota\omicron\varsigma$, and beneath this the name $\text{CIM}\omega\text{N}$. The vertical column to the right of the bust reads: $\text{OZHA}\omega\text{THC}$. The figure, therefore, represents the Apostle Simon Zelotes.

Next to Simon is a figure of which little remains. On the left it is inscribed OAGIOC , and on the right, ΓΕΡΜΑΝΟC , without doubt the famous patriarch Germanos of Constantinople of the first half of the eighth century (715-729). Next to him is another bishop (both Germanos and he wear the *omophorion* with crosses at the shoulders) whose inscribed name is missing but whose portrait is otherwise relatively well preserved. He will be identified later.

The remnants of mosaic in the lunette directly opposite (at "D") are even more fragmentary than the others, yet, all three busts can be identified. The figure to the right is the pendant to Simon Zelotes across the way, and thus might be expected to be the last of the series of six Apostles in the western wall. Although only the top of the head is preserved, a bit of the inscribed setting-bed shows that, as in the case of Simon, the $\delta \acute{\alpha}\gamma\iota\omicron\varsigma$ is rendered by a monogram to the left in order to present the name on that side and the surname, by way of further identification, on the right. The first two letters of the name are *iota* and *alpha*, and should therefore refer to one or the other of the two James'—either to $\text{Ἰάκωβος } \delta \tau\omicron\upsilon \text{ Ζεβεδαίου}$ or to $\text{Ἰάκωβος } \delta \tau\omicron\upsilon \text{ Ἀλφαίου}$.

The first two letters of the name of the central figure are again preserved in the setting-bed. Since, as will be seen, his companion on the left was, like Germanos across the way, a patriarch of Constantinople, the fact that the name of this central figure begins *tau alpha* leads one to the conviction that here too was

represented a celebrated patriarch of Constantinople, namely, Tarasius (784-806).

From the name of the third figure, at the left, there remain four complete letters and the top of the fifth. There is no doubt that he is Methodius, the mid-ninth century patriarch of Constantinople (843-847).

Among the four patriarchs shown confronting one another in the two lunettes there is a discernible chronology and theme. Priority among the four is held by the first patriarch in the eastern lunette: Germanos (first half of the eighth century). His pendant in the western lunette is Tarasius (end of the eighth, early ninth century). Next should come the bishop in the eastern wall whose name is missing, and finally Methodius (mid ninth century) in the west. If we supply the name "Nicephorus" for the unidentified bishop we would again have another patriarch of Constantinople.⁵ He would also fit chronologically into the series for he succeeded Tarasius in 806 and was patriarch well before Methodius. The theme, as well as the chronology, become evident when certain historical events are recalled.

Germanos was the patriarch who was forced out of office because he opposed the iconoclastic policies of the Emperor Leo III and was later anathematized by the iconoclastic Council of 754. It was he who witnessed the banning of images at the beginning of the first phase of Iconoclasm despite his opposition. Tarasius, opposite him, saw the end of the first phase and temporarily restored the images, having presided over the Seventh Oecumenical Council in 786-7 for that purpose. In identifying the third of the patriarchs as Nicephorus we have something of a repetition of the experiences of Germanos, for, as patriarch during the reign of Leo V, the Armenian, he opposed the renewal of iconoclastic policies and, like Germanos, was deposed. Thus Nicephorus was, so to speak, the second Germanos and saw the beginning of the second phase of Iconoclasm. Finally, Methodius, pendant to Nicephorus and companion of Tarasius, presided at the final and triumphant restoration of images during the reign of the Empress Theodora. Methodius was patriarch at the meeting of the Synod of 843 which is believed to have confirmed the acts of the second council of Nicaea of 787 with regard to icons.⁶ It was the same Synod of 843, while Methodius was patriarch, that instituted the Feast of Orthodoxy, first celebrated on the 11th of March of that year. On that occasion a procession, originating at the Church of the Virgin Mary at Blachernae, went to the Great Church of Hagia Sophia where, after careful exposition of the theological basis for the veneration of sacred images, the triumph over the heresy of Iconoclasm was celebrated. In the Synodicon of the Feast of Orthodoxy⁷ the following four patriarchs are singled out, as a group, and especially acclaimed as true priests of God,

defenders and teachers of Orthodoxy: Germanos, Tarasius, Nicephorus, and Methodius, in that order. To them all present bow down. They were thus bound together as an epitome of the fight against Iconoclasm, and a recognition of their unity in that fight is made, even to this day, not only in their being jointly acclaimed in the service of the Feast, but in these mosaics in Hagia Sophia as well, where they are honored in a remarkable way by being ranged with the Apostles of Christ as the true *didaskaloi* of Orthodoxy.

The fifth area of mosaic and setting-bed hangs most precariously overhead. It contains fragments of four full length figures which originally stood in the two upper zones. The orant figure in the eastern upper zone is preserved in part to most of its full length. The saint is young and beardless, and at a glance might be thought to be female, but, as can most easily be seen even in moderate light from the floor or in a photograph, the inscription identifies the figure as Saint Stephen (ΣΤΕΦΑΝΟΣ). We have here, therefore, the first Christian martyr. The very characteristics of dress and feature shown in the mosaic can be paralleled in other representations of the Protomartyr.

The head to the right, all that remains of the first figure at the South end of the room, is clearly that of an imperial personage. The lower fillet of his crown, studded with representations of pearls, is still preserved in mosaic and from the crown are suspended the imperial *prependulia*. Enough of the costume survives on the right shoulder to show that the figure was clad in a gold-embroidered *loros*. Exactly as in all other figures this one is inscribed at the left ΟΑΓΙΟΣ. The name of the saint, on the right, is not complete, but the letters ΩΝCTAN are easily deciphered in the setting-bed. Judging from the alignment of this fragment of the inscription with that accompanying Saint Stephen, there would have been space above the Ω for only one letter. If we supply a K as the missing first letter the name should without doubt be completed as [K]ΩΝCTAN[TINOC]. Beside the first Christian martyr there stood, therefore, the first Christian Emperor.

Of the figure that once stood opposed to Constantine ("D" on the drawing), only the left hand remains. It was an orant figure with long sleeves and tightly fitting cuffs.⁸ Opposite Saint Stephen was a bishop; two arms of the cross on the *omophorion* of the right shoulder remain.

With some effort of the imagination it is possible to gain an impression of the once splendid decoration of a good part of this room. Below the busts there was doubtless a plaster cornice, and below that, all the

way to the floor, there were certainly marble revetments. Some of the metal attachments are still visible in the walls, and Salzenberg speaks as though the marbles were still in position a century ago.⁹ The floor was paved in patterns formed of marble slabs. Their imprint is still visible. In the lower zones of the vaults of the two southernmost bays there were originally twelve Apostles and four Patriarchs (sixteen busts in this part of the room). From the spacing of the fragmentary survivors of the upper zones and observation of their relation to the busts in the lunettes beneath, it is certain that originally twenty full length figures occupied the two upper zones. This gives us, for the two bays, a total of thirty-six figures and busts. When the three figures above the door at the northern end and an unknown number of figures in the barrel vault immediately in front of them are added, it is evident that the room exhibited a truly impressive array of mosaic figures—aside from the mosaics in the great *naos* of the Church, the largest and most compact group of which we have any evidence in Hagia Sophia.

¹ W. Salzenberg, *Alt-christliche Baudenkmale von Constantinopel* (Berlin 1854) 18, 32, and pl. 31, fig. 7.

² G. P. Beglery, in *Izvestiya Russkago Arheologicheskago Instituta v Konstantinopolë* (Sofia) VIII, 1-2 (1902), 117-118. Certain statements and inferences make it uncertain that this document really refers to the mosaics here under discussion.

³ The forms of the vaults are in reality quite different from those suggested in any previously published plan of Hagia Sophia. Compare, for example, the plan of Salzenberg, *op. cit.* (*supra* n. 1), pl. 7; E. M. Antoniadès, "Εκφρασις τῆς Ἀγίας Σοφίας" (Athens) I (1907), pl. IH' and II (1908) 293, fig. 367; E. H. Swift, *Hagia Sophia* (New York 1940) pl. 2, all of which falsely indicate the presence of three groin or cross-vaults.

⁴ The true heights of the vaults above the floor can be approximated by lowering the section lines of the summit of the vault so as to rest on the top of the two tympana at either end.

⁵ T. Whittemore, *The Mosaics of St. Sophia at Istanbul*, Preliminary Report of the First Year's Work, 1931-1932 (Oxford 1933) pl. 12.

⁶ There are many representations of Nicephorus in art, some from the ninth century. The type is perfectly compatible with our identification of his portrait.

⁷ The records of this Synod are lost.

⁸ As found in the *Triodion* of the Greek Orthodox Church, ed. M. I. Saliberos (Athens, n. d.) 146, 2.

⁹ One is tempted to speculate that a suitable pendant to Constantine would be his sainted mother Helena.

¹⁰ *Op. cit.* (*supra* n. 1) 18.

ARCHAEOLOGICAL NEWS

EUROPEAN LANDS

THE editor's thanks are due to the various European scholars whose reports are printed below. Considerations of space made it necessary to shorten the reports in some degree. Since many of the local journals cited are unavailable to the editor, responsibility for the references has been left to the contributors.

FRANCE, 1950

BY PAUL-MARIE DUVAL

Directeur des Études Gallo-Romaines à
l'École Pratique des Hautes Études
(Sorbonne)

A very interesting and important discovery was made at **Orange** (Vaucluse) in 1949 and systematic excavation has proceeded there in 1950 under the direction of J. Sautel. Numerous fragments of two, perhaps three, land surveys of the district around Orange, inscribed on marble, have been found in a deposit of ancient debris. Some fragments of this survey were previously known, but the new pieces number more than one hundred and together make up the most important survey of this type known from the provinces of the Roman Empire. The document is of the Flavian period, dated in A.D. 77. The rectangles of the survey represent rectangular land areas of two hundred *iugera* in extent; the surveyed section measures in actual extent 28 by 22 kilometers. The inscriptions cut in the interior of the rectangles distinguish lands exempt from taxation; lands given to the Tricastini, neighbors of Orange; lands rented (*subseciva*) according to five different rates to bidders whose names are listed. The monetary fractions indicated are particularly interesting. The document is a municipal, not a state document. As well as this important discovery, numerous fragments of the sculptured decoration of the theater were found: friezes with Dionysiac subjects and representations relating to the games, as well as fragments of statuary.¹

Another important epigraphical discovery was that of the earliest Latin inscription yet found in France. This was a milestone found on the course of the *Via Domitia* in 1949, in the Department of the Aude, by M. Campardou. The inscription reads: *Cn(eus) Domitius Ahenobarbus Cn(ei) f(ilius), imperator*; it bears the figure XX, indicating such a distance to the south

of Narbonne. The inscription can be dated *ca.* 118 B.C.²

Elsewhere in France considerable archaeological excavation has been carried on at various sites, the following results of which are to be mentioned.

At **Glanum** (St. Remy-de-Provence) H. Rolland discovered the foundations of two adjacent podium temples, the statue of a youth with a *bullā*, and some fragments of ornament from a trophy.³

At **La Graufesenque** (Aveyron) L. Balsan and A. Albenque have resumed operations with interesting results: for the first time a Gallic level with vases of La Tène types has been discovered. About a dozen *graffiti* were also found, potters' marks on cup fragments and two unknown names of vases. The presence of late vases indicates that the workshops continued manufacture later than was formerly believed, for at least a great part of the second century after Christ.⁴

On the Côte d'Azur underwater investigations have been pursued. At **Anthéor** where the wreck of an ancient merchant ship was found some amphoras have been recovered. One stopper indicates by its stamp that the cargo was from Campania; it is to be dated in the first century B.C.⁵

At **Strasbourg** the stratigraphy of the ancient city is gradually being revealed by J.-J. Hatt.

At **Bavai** the uncovering of the great underground portico, discovered in 1942, is being carried on by H. Biévelet.

At **Vaison** J. Sautel has discovered Gallo-Roman foundation blocks and the traces of a primitive sanctuary under the Cathedral. The sanctuary dates back to the fifth century B.C.

At **Entremont** (Bouches-du-Rhône) excavation is proceeding and F. Benoit has discovered a section of the "Sacred Way" which led to the religious center whence come the fragments of statues discovered since 1943, the "severed" heads.

The pre-Roman occupation at **Ensérune** (Hérault) is being farther revealed, under the direction of J. Jannoray, by the excavation of the cemetery.

The work of reconstruction at **Amiens** has revealed a large building, probably the remains of a public bath; the work is under the direction of F. Vasselle.

In **Paris** the excavation of the "Palais des Thermes" (Musée de Cluny) has revealed two new large rooms with hypocausts in the southwestern part of the building.

At **Arles** J. Formigé is successfully continuing the excavation of the cryptoporticus.

¹ *CRAI* 1949, 425-29, figs. 1-4; *ibid.* 1950, 61-69, fig. 1; *Le Monde*, March 20, 1951.

² *Le Monde*, May 23, 1951; *Gallia* 7, no. 2 (1949).

³ *Ibid.*

⁴ *Ibid.*

⁵ *Le Monde*, December 9, 1950.

AUSTRIA, 1950

BY HERMANN VETTERS

Austrian Archaeological Institute

PLATES 43-44

Prehistoric Period

This material has been collected through the kind services of Frau Dr. Herta Ladenbauer-Orel (Bundesdenkmalamt).

Burgenland

In **Oggau**¹ Dr. Ohrenberger of the Landesmuseum investigated more graves of the Wieselburger Culture of the early Bronze Age, and, at **Loretto**, excavated a cemetery of the Urn Field period (Hallstatt A) productive of remarkable transitional material.

Lower Austria

In **Senftenberg** Dr. Hampl of the Landesmuseum conducted a systematic investigation of the whole plateau which revealed a large settlement dating from Neolithic to Bronze Age times. The late Neolithic settlement offered interesting results for the study of the extension of Nordic Culture on the Danubian substratum. It is planned to investigate the south plateau in 1951. At **Neusiedl an der Zaya** Dr. Hampl cleared an early Bronze Age settlement and a roadway contemporary with it. On the plateau of **Malleiten** near Bad Fischau Hampl also investigated a wall system of Hallstatt date. This is the site of previously known Hallstatt mounds. A large scale excavation is planned for 1951. Near **Grossmugl** Dr. Krenn of the Naturhistorische Staatsmuseum excavated the smaller of two Hallstatt grave mounds; rich finds were made, among which vases of bull's head form are to be particularly noted.

Upper Austria

Near **Überackern** the Heimatmuseum of Braunau a. Inn excavated graves of the Urn Field period (Hallstatt B).²

Steiermark

L. Berg has published an account of the excavations at **Salzofenhöhle** mentioned in the report of 1950.³

Tirol

At **Kelchalpe** Prof. Pittioni has discovered, in addition to the remains of mining activity, a rectangular house of the Urn Field period with two wooden troughs hewn out of large tree trunks.⁴

Vienna

Excavation by A. Neumann has fixed the date of the settlement on the **Geoleshöhle** at Höllenstein to the earlier Stone Age.

Vorarlberg

At **Kadel** Dr. Vonbank of the Landesmuseum has found a bridge head important for its situation near the Kummberg at Koblach.⁵ Neolithic and Urn Field remains were present in large quantity.⁶

Roman Period

Burgenland

In **Parndorf** B. Saria and G. Pascher excavated the building noticed in last year's report,⁷ under the auspices of the Austrian Archaeological Institute and with funds provided by the Burgenland government. The building is the manor house of a large estate, measuring 41 by 45 m., and containing 30 rooms of which at least 16 were heated. Work buildings were erected north and south of it and the area was enclosed by a wall ca. 200 m. to the south of the manor. On its west front was its reception hall, a large room projecting 15 m., together with its apse. Other interesting features are a cold water bath and two apsidal rooms on the front at the east corner. Alterations and additions of at least three periods are distinguishable: the above mentioned large room and the heating system, at first with hypocausts, two of which are preserved, then with channels in T form; these were finally destroyed or went out of use. The best period of the building was in the third century, and it was destroyed by fire at the end of the fourth century. Belonging to its best period is a large mosaic, 320 m.², with representations of Ceres (pl. 43, A), Bellerophon and the Chimaera (pl. 43, B), Silenus, and an elaborate border in four colors (pl. 43, C). A grave inscription, reused as a drain cover slab, is of some historical interest; it records a *princeps* of the *civitas* of the Boii, *M. Cocceius Caupianus* and his wife, *Cocceia Dago-vassa*.⁸ In the debris of the building were found many fragments of wall paintings with figured representations and graffiti.

Kärnten

The important and interesting excavations on the **Magdalenberg** (pl. 43, D) were continued under the same auspices and direction as previously.⁹ It was

established that the town hall rose two stories in height, 16 m., on the north side and reached a height of ca. 20 m. above the Forum on the neighboring natural terrace. On the east front was an ascent, corresponding to the entrance, which turned into the building to the north at an angle of 90°. A servants' stairway of wood led to the northeast corner from Court E. The building itself is divided into three parts, each ca. 15 m. in length, so that its complete length, from north to south, was ca. 45 m.; its width was ca. 36 m.

The whole south part of the complex (F-U) was cleared. In the hall, F, and the room, M, inscriptions were found under the collapsed walls. They were cut on slabs of imported red marble and apparently had been attached to the wall. On them are names of Nordic tribes, as dedicators: Norici, Saevates, Laianci, Ambidravi, Ambilici, Aguontini, Viruaienses. On one inscription is a striking mention of the Elveti:

A]MB[IDRAVI or ILICI . . .

L]AIANC. AM[BILICI or IDRAVI

ELVETI

Evidently this group is a dispersed remnant of the Helvetians, or rather, Tigurini, who occupied the Noric mountain passes on the flank of the Cimbri, driving into Italy in 101 B.C. (Florus 1.38); Sulla defeated them (Plutarch *Sulla* 4). R. Egger has concluded, on the evidence of this inscription and of the place name, Tigring, south of Feldkirche, that at least a part of the Tigurini found a new home in Noricum at that time. On another inscription a dedication was made to *Juliae Caesaris Augusti Filiae*, the daughter of Augustus. All these inscriptions indicate the official character of the building; in this vein is a painted inscription of the third century A.D. on the north wall of the vestibule; it expresses hopes for the victory of the emperors: *dii augeant de nostris annis Augusti et liberorum eius . . . / vita Augusto ab . . . et vita Caesari XV et vita Augustae . . . / Augusto nostro multos annos bono orbis nato bono. . .* Another inscription attests the long life of the building, viz. a prayer, scratched in the late fifth or sixth century A.D.: *Quando migramus de vita saeculi / dominus noster nobis propitius sit. Dominus* is abbreviated, *DMNS*.¹⁰

The kitchen (G) adjoining the hall, F, on the south was divided into two parts by a wooden construction, anchored in the wall and into the floor by pegs, which was covered with wickerwork filled with clay mortar as described by Pliny.¹¹ The room is dated by many pottery fragments of the period, 50 B.C.—A.D. 50; they are of imported fabrics with stamps of upper Italian and Istrian workshops. To the west are a group of rooms (H–N) on a higher level which served as store chambers and workrooms; presumably the servants' quarters were here also. A water channel

runs through the rooms with about 5 m. of its lead pipe preserved.

Rooms A–D¹² were carefully investigated and Room A was found to have three building periods, not two as originally supposed. This was particularly clear in the foundations of the apse. Within the large foundation blocks of the third period in the middle of the apse, there was found a circular mosaic in the form of a roll enclosing a level base (pl. 44, A). Originally it had held a low, metal water basin. Room A, alone in the group, was heated by a hypocaust. In Room B a well preserved mosaic floor prevented deeper digging so that only two periods were observed. In Room D a mosaic floor of the second period was found as in Room B, but its three periods were investigated (pl. 44, B). The water system of the first period was revealed by a pit. A terrace wall, 3 m. in thickness and still preserved to a height of 6 m., surrounded these rooms and the Temple complex near them. Together they formed the architectural group of the north side of the Forum. At the first floor level was an open arcade.

Of the Temple complex, measuring ca. 3000 m.², about two thirds was cleared, with particular attention to the west hall flanking the court. Three periods were distinguished. Entrance was made in the last period by a flight of steps with three landings which replaced a doorway. The Temple rested on a podium, 2 m. in height, and originally encased with marble. In late antiquity, perhaps in the fifth century, a one-roomed house was built in the court with its walls resting on dry stone foundations clearly designed to support a wooden construction. The former east wall of the west hall served as a foundation, and the building was erected after the Temple was destroyed. On the south front of the court wall are the bases of two altars placed symmetrically to the temple. About 1000 small finds were made in the campaign of 1950, which all date to the period between Augustus and Claudius. For the first time unmistakable La Tène remains were found, in the deep strata by the mountain road. They are dated by an Arretine beaker of the earliest period with a comic scene in relief. Remains of houses by the street indicate that the whole south slope of the mountain was settled by terracing. To preserve the remains part of the town hall was restored and roofed and the excavated parts of the Temple protected.

Lower Austria

At *Carnuntum* excavation was carried out by E. Swoboda on the civilian center with remarkable results. The westernmost building, the ground plan of which showed non-Roman traditions,¹³ was shown to be the central part of a mercantile complex, not a separate structure. Its plan was hitherto unknown.

Parallel to the ancient street a small retail shop was found, behind which were working establishments; adjoining them were dwelling houses with floors of mosaics and small bricks. The rooms were in some cases heated. To the east of this building complex were two others of similar design and size, 50 by 14 m. Swoboda sees in these structures the conventional type of Carnuntine merchant's house. All three form an insula of 55 by 55 m.; on the east it is adjoined by another insula containing a single structure (Parzelle 141).

These structures surpass the usual trading establishments of the western Empire in size and attest the wealth of the Danubian city of Carnuntum. It is difficult to date them, for several building periods are involved and closely dateable objects lacking. Those uncovered probably belong to Carnuntum's second period of importance, after the Marcomanni War. They were still in use in the fourth century and were preceded by an earlier period. Remains of this latter were observed beside the street running from east to west which was built over walls of this first period. Evidently the street did not belong to the first town which was thoroughly destroyed by the Marcomanni. In the western provinces the houses of artisans and merchants were situated for the most part on the main streets, while the wealthy houses were on the side streets. Thus, it is justly concluded that such settlements were formed out of pre-Roman road-villages. Applying this principle to Carnuntum we find merchants and traders settled on the southern edge of the town far from the center. The civilian town was a new Roman foundation and not the continuation of a pre-Roman road-village. The numerous small finds date from the period of the first to the fourth centuries A.D.

At **Mautern**¹⁴ a wall, 2.80 m. in thickness, was discovered accidentally and investigated by H. Thaller. It was apparently the fortress wall of Faviana; sherds indicated continuous habitation of the site to the eleventh century. In the southern part of the town remains of a house were investigated and numerous fragments of *terra sigillata* of the first century were discovered as well as the fragment of a military diploma of Hadrian's period.¹⁵ In the eastern part of Mautern a building with hypocaust heating was found.

Near **Wilhelmsburg** in Minichwald meadow a find of ancient glass was made. Investigation under H. Thaller showed a well preserved glass oven, the first of its type on the European mainland. It measured 5 by 3 m., was circular in form, and was built on a carefully constructed platform of broken stones; the foundation of the oven itself was of neatly laid stones bonded with mortar. At regular intervals on the front are small supporting walls of bricks which supported

the tiles of the oven's roof. A channel led into the oven on each of the four sides. One of them fanned out at the front and, since it was filled with cinders and ash, was evidently the stoke-hole. At the right corner was a second channel with a separate roof which stretched 2.20 m. to the south edge of the platform. It was a cooling chamber. The other two chambers presumably served as intake and outlet drafts. The inner chamber was rectangular in plan and its floor consisted of a large millstone, 1 m. in diameter, with rectangular stone slabs radiating from it. Fragments of the melting pot and small crucibles were found as well as many fragments of molten glass. Another, still better-preserved kiln will be excavated in 1951.

Upper Austria

In **Linz** W. Jenny and F. Juraschek excavated a small rectangular watch- or road-tower under a bombed house. Its basement, on which a superstructure of wood had rested, is fully preserved as is the vaulted door opening for a flight of steps leading down at the southwest corner. The structure was apparently destroyed in the Marcomanni War. The Arretine and Padane *sigillata* found indicates that the tower was erected in the Augustan period and served as a military guard post for the Danubian frontier shortly after the occupation of Noricum.¹⁶

At **Totenhölzl** H. Vetter made a preliminary investigation of a site near the mouths of the Alm and Traun Rivers where ancient remains had been noticed since 1820. A well preserved, rustic villa of seven rooms was cleared, the center of which was a room 5 m. square. A small vestibule adjoined it on the south; to the west was a larger room with a niche on its west side. The numerous remains of wall paintings show that the building was richly decorated, and two rooms were heated. The building was twice destroyed, in the Marcomanni War and at the end of the fourth century. Further excavation is planned for 1951.¹⁷

Tirol

At **Aguntum** F. Miltner resumed the excavations discontinued since 1920.¹⁸ The city wall was cleared to the north up to a point where it had been destroyed by a cross-wall from the northwest. Immediately to the west of this point were the remains of a portico built in the early third century: walls, column drums and a capital. In the southern stretch of the city wall a small gate was found 30 m. to the south of the great, restored city gate. Remains of street paving in the gate indicated the existence of the street along the east side of the city wall. To the west of the city wall the area was completely built up, with contemporary houses at right angles to the wall, and those of an earlier date diagonal to it. The gate which had been formerly identified by E. Swoboda as the west gate

was found to be the east gate.¹⁹ Several building periods were distinguished of which the earliest was Claudian; it is below water level. The earliest houses near the wall are of Domitian's period, whereas the wall and its contemporary buildings belong to the time of Marcus Aurelius. The complex lasted until the end of the fourth century.²⁰

At Lavant F. Miltner continued excavation.²¹ The altar of the Peterskirche was constructed of reused Roman material as an inscribed architrave in the table showed: *M. Fil. . . . Iur Dic.* Part way up the hill the foundation of a church measuring 40.50 by 10 m. was dug.²² It consisted of a presbyterium, a cella and a narthex, and was probably contemporary with Fliehburg.²³ The foundation of a bishop's throne was identified, which would indicate the earliest bishop's church in Austria. After the destruction of the earliest structure a new building was erected over the cella and narthex in which the former priests' seat was built at the end of the cella. A capital suggests a date at the turn of the sixth and seventh centuries by its style. Miltner suggests that this is the date of the foundation of the early medieval town.

Individual Finds

In Purbach (Burgenland) two dedicatory inscriptions were found, the first to *Nymphis Augustorum*, the second to *Fortuna Augustorum*. Nearby was a fountain of the Roman period.²⁴ At Möselhof (Kärnten) C. Schuster has found the remains of a Roman building. At St. Martin b. Villach H. Polenz found the gravestone of a certain *Mansueto* and his wife *Cogitate*. Other grave monuments are reported from the church of Maria, Gailitz and from Winklern (Kärnten). H. Niemitz has determined that the gravestone CIL III 4547, from Scheiblingkirche (Lower Austria) is not of Roman but of medieval date. In Ardagger (Lower Austria) Dr. Hampl excavated a late Roman grave with an "onion head" fibula as a dedication. Many finds have been made on the site of the legionary camp of *Lauriacum* (Upper Austria): two marble torsos, perhaps an emperor statue and Genius, the bronze figure of a Syrian (?) deity wearing a mural crown, and a dedication to Aurelian. Near Mautern-dorf at Castle Moosham architectural remains were found, including an architrave inscribed: *Leo Invicto Mithrae*. This is presumably the site of a large Mithraeum, and excavation is planned for 1951. It is significant of the height to which Roman settlement penetrated into the Alpine valleys. High up near Matrei in the East Tirol trumpet fibulae of the Kovrig type (*Diss. Pann.* II 4, p. 116) were found.

¹⁹ *AJA* 52 (1948) 234.

²⁰ *OÖ. Heimatgaue* 4 (1950) 82 ff.

²¹ *AJA* 54 (1950) 410; *Die Höhle* 1950.

⁴ *AJA* 52 (1948) 234; R. Pittioni, "Prehistoric Copper Mining in Austria, Problems and Facts," *Univ. of London, Institute of Archaeology, Report* 1950.

⁵ *AJA* 54 (1950) 410.

⁶ E. Vonbank, "Steinmale i. Vorarlberg," *Jhb. d. Vorarlberger Landesmuseum*; "Inselberge im Bodensee-rheintal, *Jhb. d. Schweiz. Gesellsch. f. Urgeschichte* 40 (1950) 52 ff.; *Quellen zur Urgesch. Vorarlbergs* (Montfort 1949) 102 ff.

⁷ *AJA* 54 (1950) 412; a preliminary notice by G. Pascher appears in *Burgenländ. Heimatblätter* 12 (1950) 49 ff.

⁸ B. Saria, *ibid.* 13 (1951) 1 ff., with transcription and interpretation.

⁹ *AJA* 53 (1949) 191 ff.; 54 (1950) 412; preliminary notice with plans in *Carinthia* 149 (1949) 139 ff.; 150 (1950) 140 ff.; 151 (1951) for the year 1950. The staff of the excavation consisted of: Univ. Prof. Dr. R. Egger, Doz. Dr. Hedwig Kenner, Dr. Gertrud Mossler, Ing. Hans Dolenz, Dr. Walter Görlich and the author.

¹⁰ R. Egger, *Carinthia* 150 (1950) 485 ff.

¹¹ Pliny *Nat. Hist.* 35.48.

¹² *Carinthia* 151 (1951); *AJA* 53 (1949) 192.

¹³ *AJA* 54 (1950) 413; E. Swoboda, *Mitteilungen d. Vereines d. Freunde Carnuntums* 1950, p. 3 f.; E. Tolde, *Gnomon* 22 (1950) 314 f.

¹⁴ *AJA* 54 (1950) 414.

¹⁵ H. Thaller is preparing the publication for the *JOAI* 1951.

¹⁶ A. Jenny, "Die Ausgrabungen auf dem Linzer Altstadtplatz," *Jhb. d. Stadt Linz* (1950) 101 ff.

¹⁷ A preliminary report appears in the *OÖ. Kultur-berichten* 47 (1950) 1; a report appears in the *OÖ. Heimatgaue* 1951.

¹⁸ E. Swoboda, *JOAI* 29 (1934), *Beibl.* 5 ff.; *idem*, *Führer d. Aguntum* 1935.

¹⁹ F. Miltner, *Lavant und Aguntum* (1951) 14 ff.

²⁰ *Sdsch. d. Österr. Arch. Institutes* 9 (1916) 61 ff.

²¹ F. Miltner, *JOAI* 38 (1950) *Beibl.* 37 ff.; with plans and photographs.

²² *Idem*, *Lavant und Aguntum* (1951) 4 ff., with plans and illustrations.

²³ *Ibid.* 7.

²⁴ B. Saria, *op. cit.* 7 f.

GERMANY, 1948-1950

PLATES 45-48

Prehistoric Period

BY PROF. DR. WOLFGANG DEHN,

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Since the last report in the *AJA*¹ on prehistoric investigations and discoveries in Germany regular notices have appeared or are in preparation for many districts in local periodicals.² Beginning with its current issue *Germania*, *Anzeiger der Römisch-Germanischen Kommission* has undertaken to present a concise sum-

mary entitled, "Wichtige Neufunde und vorläufige Grabungsergebnisse," for archaeological discoveries in Germany.

Palaeolithic and Mesolithic

At **Ahrensburg** and **Rissen** Dr. A. Rust and Dr. H. Schwabedissen have discovered stone foundations on the right of the lower Elbe River. They are designed for the tent-shaped huts of the north German, late Palaeolithic period. The excavators consider it possible to distinguish between lighter summer dwellings, 2-4 m. in diameter, and sturdier stone-enclosed winter dwellings, 4-7 m. in diameter.³

Near **Lehringen** by Verden a.d. Aller (Hanover) the skeleton of an elephant (*elephas antiquus*) was found in one of the latest transitional marl layers. Between its ribs was a spear of yew-wood, over 2 m. in length; near it were flint tools of Levalloisian type.⁴

Near **Rüde**, northeast of Schleswig, Dr. H. Schwabedissen excavated a Mesolithic bog-dwelling (late Oldesloe-Gudena group) with bone, horn and flint artefacts; especially important were many wooden instruments, spears, arrows, paddles.

Neolithic

Some new long-buildings of the Bandkeramik Culture have been discovered; they are clearly to be identified as dwelling houses, not work buildings.⁵ Their characteristics are similar over a wide area: orientation to the northwest, dimensions of 20-30 m. by 5-7 m., and details of construction. Near **Bracht**, Kr. Marburg, Dr. O. Uenze has identified the remains of a house of this type outside a contemporary Bandkeramik fortified site. Its palisade and graves are similar to those of Köln-Lindenthal and Plaidt. The finds are of the latest ceramic types, Köln IV; near **Bochum** Prof. A. Stieren-Münster has excavated a Bandkeramik settlement with well preserved foundations of long-buildings.⁶

Near **Wahlitz** (Sachsen-Anhalt) a house complex of related, but slighter type was excavated: a small wall trench surrounds a room measuring 11 by 6 m. It belongs to the middle German, late Neolithic Schönfelder group and overlies a Rössener settlement.⁷

Additional central German Stone Age investigation has been made by the Landesmuseum of Halle; at **Magdeburg-Salbke** early Bernburger pottery has been found with two funnel-beakers. That the groups are contemporary is indicated by microscopic study of the clay. The excavation of the already known cemetery of the Elb-Havel group at **Tangermünde-Süd**, Kr. Stendal,⁸ has been continued with good results. Typical pottery, stone and bone objects and three interesting graves have been found. The first is that of a "fisherman" with curved hooks and weights for nets; the second that of a "flint-master" with a flint

axe, eleven cores of antler and eleven oblique arrow heads; the third is a "hunter's" grave with fifty eye-teeth of wolves or dogs which were used for decorative purposes, an armlet of bone beads, fourteen oblique arrow heads with the resin of the fastenings preserved, a stone axe and small flint tools.

Two bog-settlements of Holstein Megalithic Culture, at **Heidmoor**, Kr. Segeberg, and near **Oldesloe**, excavated by Dr. H. Schwabedissen, yielded interesting results. Pile houses, passage-grave pottery, bone and antler material, the latter with late Palaeolithic "chip-technique," and flint tools of "Palaeolithic" type were found. In the area of **Lüneburg** Prof. E. Sprockhoff investigated five Megalithic burials in which globular-amphoras and vases related to the Baden Culture were found.⁹

Bronze Age, Hallstatt and La Tène

In **Land Sachsen** a rich find of late Bronze Age bronze vessels was made.¹⁰

Near **Niederolm** near Mainz a cremation of the late Urn Field period was found in a small cemetery; it had a Knovize "tier-pot" which is the westernmost trace of such influence yet found.¹¹

The excavation of the extensive cemetery in the northern district of **Singen** (Oberbaden) by Dr. W. Kimmig raises many considerations about the problem of continuity of the settlement. It has so far produced: a grave of the Bandkeramik pottery, about thirty early Bronze Age burials with rich metal material, but no pottery, three mound graves of the Bronze Age, about fifty very rich graves of the earliest Urn Field Culture to the end of Hallstatt D, some transitional graves with Certosa fibulae, a cemetery of La Tène B and a few cremations of La Tène C. Later material is missing.

The excavation of Prof. K. Bittel and Dr. A. Rieth on the **Heuneburg bei Hundersingen** (South Württemberg) has opened a new vista on the cultural affinities and the social organization of the late Hallstatt and early La Tène periods. The excavation was concentrated chiefly on the fortification girdle, which, at two widely separated points, contained at least three overlying walls. The latest wall (1), built of Jura stone and badly preserved, contained an early La Tène stratum on the inside; it had very characteristic wheel-turned pottery, omphalos cups, an imported black glazed sherd, probably of the Gnathia class, from lower Italy (fourth century). Under the early La Tène wall lay the post holes and wooden framework of a wall built of stone, wood and earth (2); to it belonged many finds of late Hallstatt date. This wall was in its turn set in the ruins of an older wall (3) which is of a new type in South Germany. On a foundation, carefully built of roughly dressed Jura limestone to a height of 1 m. and to a width of

ca. 3 m., rose a superstructure of sun dried brick (pl. 45, A). The wall has rectangular, tower-like bastions one of which has been excavated. The builders of the wall must have known models from the south or southeast. This wall also belongs to the late Hallstatt period; below it are still earlier Hallstatt defensive remains. A large number of small finds of late Hallstatt date were made: fibulae, white-ground pottery, and a gold culander (pl. 45, B). Evidently Heuneburg was the seat of a princely family of late Hallstatt-early La Tène times (probably Celtic); their burials are to be seen in the rich mounds of the nearby "Giesshübel" forest.¹²

From a bog near Osterby, Kr. Eckernförde, comes a severed male head with its hair dressed in the Suebian style (pl. 46, A, B); the skull was crushed in, and the head found wrapped in a fur; it was probably buried in the bog about the time of the birth of Christ.¹³

In Aukamper bog near Eutin (Holstein) two cult figures (pl. 47, A) were found, greater than life size. They represented a male and a female divinity and were carved from oak. Their date is obscure, probably the Iron Age, perhaps the early medieval period.¹⁴

Roman and Medieval Periods

By DR. H. V. PETRIKOVITS

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German archaeology has again in 1950 been conditioned by the damages of war and limited economic means; damaged museums have been restored and towns in ruins investigated. No especial notice, however, will be taken of the re-opening of museums, the planning of research programs, the archaeological organizations and the greatly increased output of scholarly publication in 1950.¹⁵

The investigation of cities affords important new information. The beginnings of Roman Cologne go back to Agrippa. The work of F. Fremersdorf and O. Doppelfeld show the great extent of the *oppidum Ubiorum* on the place of the later colony. A great bath complex with a caldarium shell measuring 16 m. in inner diameter has been found, the first building period of which antedates the founding of the colony. This complex, like other large walls in the heart of the colony, is not rectangular to remains of the Roman street system. New investigations of the Roman city wall of Cologne fix its date to the time of the founding of the colony in A.D. 50.

Excavation of churches has thrown new light on Christianity in Cologne in the fourth century. St. Severin, St. Gereon and St. Ursula lie within older Roman cemeteries. Below the latter church two similar

complexes of basilica plan were found over several sarcophagi. A. v. Gerkan's excavations in St. Gereon have fixed the building of this church in the last third of the fourth century. St. Severin developed out of a *cella memoriae* over the grave of a martyr.

Trier was a royal seat from the time of Constantius Chlorus. Below the Trier Cathedral, Th. Kempf found the state hall of a palace which, according to legend, should have belonged to Helena, the mother of Constantine I. Kempf can reconstruct the paintings of the hall from about 50,000 fragments; the paintings were divided among rectangular fields and represented members of the royal family. The portrait of the wife of Constantine, Flavia Maxima Fausta, is very well preserved. In a central picture Kempf recognizes the likeness of Helena. Another large building of this late period in Trier has been excavated by H. Eiden: the *Horrea* of St. Irminen in the northwest part of the city on the Mosel. The preservation of the two story building is so good that the elevation can be definitely reconstructed. It had an arcade in relief for which flat pillars formed the support. The roof of the ground floor was supported on pillars. In the ground plan two symmetrical halls on each side of a loading street are distinguishable. This granary belongs, to judge from its wall construction, to the same period as the Imperial Baths, probably to the middle of the fourth century.

While only late Roman cemetery-churches are known as yet from Cologne, in Trier Th. Kempf has revealed the first cathedral of the fourth century in West Germany. The Bishop's Church of Trier is a double complex like that of Aquileia. On the site of the present Cathedral, after the destruction of the above mentioned palace, a basilica was built in the Constantinian period. It was added to in the time of Gratian by the hall, still preserved to a height of 30 m. and measuring 41 m. on the side; set in the middle of it a polygonal building was discovered. Kempf compares the Holy Sepulcher in Jerusalem and the Constantinian Octagon at Bethlehem. The complex on the site of the present Cathedral consists of a three aisled atrium followed by the basilica which is closed off from a wide hall. South of this complex and near the Liebfrauenkirche, which it partly underlies, is another atrium, a wide hall, and presumably a second basilica. Between them lies a large Baptistery. In the south basilica are graffiti scratched by pilgrims on the plaster, and paintings of the Constantinian period. The basilica was burnt in the period of the barbarian migrations, but was restored, and endured until the Norman burning of 882.

For the history of paganism in the late fourth century the find of a mosaic in a late Roman house in Trier is important. It apparently represents hitherto unknown mysteries of Leda. Their central feature

must have been the unveiling of the egg out of which Helena, Castor and Pollux were born. The spectator, upon his entrance to the room, would first see how the mystic egg was offered by a kneeling figure with the assistance of two other persons; a sacrifice followed and finally the Epiphany with the egg on the altar and the mystic group about it. In medallions hierodules are represented, presumably from the prominent families of Trier.

On the origin of the Roman cities in West Germany, O. Doppelfeld's excavation in Cologne and the work of the author of this report at the *Colonia Ulpia Traiana* near **Xanten** have brought new conclusions. L. Ohlenroth's excavation in **Augsburg**, the Roman *Augusta Vindelicum*, is of importance in this connection. This Roman city did not grow out of a native settlement, but was founded on wooded ground, first burnt off. Thus Ohlenroth found the oldest frame work, in the west of the city, and the lowest metal of the Roman streets on a burnt layer over virgin soil. The oldest buildings belong to the late Tiberian-early Claudian period. They were encircled by a strong palisade made of tree trunks up to 0.90 m. in thickness. The west gate of the palisade was first built out of such trunks, but, during the life of the palisade was rebuilt in stone. The building of a city wall in stone on a gravel foundation, probably in Hadrian-Antonine times, also involved a partial renewal of the west gate.

Military establishments as well as Roman town-complexes of this period were investigated. Most important are the excavations in the legionary camp at **Bonn**, about which E. Neuffer has informed us. The finds from the interior of the camp and a cut through the wall allowed the main building periods to be recognized. The camp at Bonn was founded when the double encampment at Cologne was broken up under Tiberius. It was built in stone in the Claudian period.

An auxiliary post, the existence of which had long been presumed, was found at **Mainz-Weisenau** about 3.5 km. southeast of the large legionary camp at Mainz. H. Klumbach found in its interior two water basins with wooden planking and many excavations for basements. Among the finds were scales from iron and bronze armor and horse trappings. Apparently this fortress was the base of a mounted troop which was raised for the German war of Gaius in 39-40. Klumbach considers that the camp lasted only a short time and was voluntarily given up.

The investigation of H. Schoppa at **Heidenkringen** fortress between Wiesbaden and the *limes* fort of Zugmantel should be mentioned. This fort seems to have been occupied only a short time and was apparently not completed. Its foundation is to be placed in the early Hadrianic period, to serve as a protection for the settlement at Wiesbaden, when, under Hadrian,

the defence in depth of the boundary was given up and the *limes* itself strengthened.

Engers, between Neuwied and Ehrenbreitstein on the right bank of the Rhine, has long been known as a guard post of the Valentinian period. J. Röder has now found the fortification ditch far from the wall, as called for in late Roman technique, in order to make the siege artillery take up its position as far as possible from the wall.

Next to the Roman towns and encampments some smaller, mainly local objects deserve notice for their artistic importance. A treasure was found *ca.* 3 km. from the fortress at **Straubing** (*Sorviodurum*) in lower Bavaria in the vicinity of a Roman manor. Under an inverted copper kettle fragments of Roman military gear and bronze statuettes were found, while around the kettle were tools and arms. It was apparently the booty of a plunderer from the destruction of Straubing in A.D. 233 or 259. The military objects include seven bronze helmets of various forms, five ornamented greaves with knee guards and embossed head armor for horses, with richly gilded and silvered reliefs. Among the statuettes is a very well executed Lar, probably of the late first century A.D. J. Keim and H. Klumbach have published this unique find in a book.

Another interesting find is a portrait head from the excavation of the Roman town near the Apostelnkirche in West Cologne. It is a good piece of the Hadrianic period (pl. 47, B), although the subject is unknown.

The investigation of early medieval history with archaeological methods has made good progress in Germany.

The old Roman cities in the west suffered much damage through general decline and the frequent raids of Germans and Huns, but were not completely destroyed. The large cemeteries near St. Gereon and St. Severin in **Cologne** show continuous use from Roman to Merovingian and Carolingian times. Cologne was a royal seat of the Riparian Franks until 510. The old churches were renewed in various ways and new foundations made. O. Doppelfeld has clarified the beginnings of the Cologne Cathedral. The results, however, of the excavation of the **Regensburg** Cathedral and in the Collegiate Church at **Mainz** are still unclear. As well as religious centers the Bishops' seats had great importance for the preservation of the old Roman towns as places of habitation as, for example, in Cologne, Trier and Augsburg. But in the latter, as excavation has shown, the Roman city walls did not last into the medieval period.

A section of a Frankish settlement has been investigated by K. Böhner. It is a village near **Gladbach**, Kr. Neuwied, of the seventh and eighth centuries.

He is also preparing a publication of the Frankish finds of the Rhine province. Frankish cemeteries have been excavated by F. Fremersdorf in **Junkersdorf** in west Cologne and by G. Durst in **Bornheim**, Kr. Alzey. From the former, in which 247 burials have been found up to the present, comes the interesting jewelry in plate 48. J. Werner has a monograph on the very rich grave of a noble lady of the seventh century at **Wittislingen** in Bavaria.

An interesting question is raised by the excavation of early medieval village churches such as those in **Breberen**, Kr. Geilenkirchen-Heinsberg, at **Doveren**, Kr. Erkelenz, and at **Römerskirchen**, Kr. Grevenbroich-Neuss. They seem to indicate that the earliest German churches of the eighth century were built in already existing cemeteries.

A settlement of the seventh-ninth centuries has been discovered near **Burgheim** in Bavaria. Here rectangular dug huts are found next to larger pile dwellings which are not sunk below ground level. The significance of the types is not yet understood, nor is it known whether this settlement is a manor or village.

The German town outside of the earlier Roman areas is not older than the tenth century. In both central and east Germany archaeology is concerning itself with questions of city foundation and development. W. Unverzagt has excavated in **Magdeburg** where the medieval complex was cleared in large part. On the old Market a large four-roomed, vaulted hall of the mid-thirteenth century was excavated. It was the cellar of a large mercantile and guild house. The river bank defences of the eleventh and twelfth centuries and a Romanesque church complex under the Johanniskirche were also investigated.

G. Mildenberger reports that in **Leipzig**, by excavations east of the Matthäikirche it appears that ditches of the early German castle of the tenth century have been uncovered. This and other finds in the Grosse Fleischergasse suggest that this district was the center of the medieval city of Leipzig. Other excavations show that the part of the old city of Leipzig which lies south of the market was first settled in the thirteenth century.

German medieval archaeology has also been concerned in both east and west Germany with military establishments. In west Germany there is an early medieval fortress-type, the so-called "Motte," of which the beginnings probably belong to the times of the Carolingian and early Saxon Emperors. They are divided into a Vorburg and the usual fortress situated on a hill. Such an establishment was excavated by A. Herrnbrodt in **Frimmersdorf**, Kr. Grevenbroich-Neuss on the Erft.

On an island in the lake of **Teterow** in Mecklenburg a city wall with a Vorburg protected by a cross-wall was investigated by W. Unverzagt. This may have been the capital of the Slavic tribe of the Circipani. The town was destroyed in 1171 in the fierce war between Otimar, the chief of the Circipani and King Waldemar of Denmark, co-operating with Bishop Absalon of Roskilde. Saxo Grammaticus has depicted it in detail. Unverzagt remarks that the island of Teterow was settled from Neolithic times right into the early Bronze Age. In the ninth century A.D. the Slavs occupied the island and built the above mentioned cross wall. Well preserved remains of the wooden bridge which linked the island to the mainland were found.

¹ *AJA* 53 (1949) 174 ff.

² Bavaria: *Bayer. Vorgeschichtsblätter* 17 (1948); 18 (1949) in press; Baden: *Badische Fundberichte* 17 (1941-47); 18 (1948-50) in press; Württemberg: *Fundberichte aus Schwaben NF* 11 (1938-50) (first part), in preparation, Hesse: *Mainzer Zeitschrift* 41-43 (1946-48); 44 (1950) in press; *Wetterauer Fundberichte* 1941-49; Rheinland: *Trierer Zeitschrift* 18 (1949); 19 (1950) partly published; *Bonner Jahrbücher* 148 (1948) 150 (1950) Westfal: *Bodenaltertümer Westfalens* 7 (1950); Sachsen-Anhalt: *Jahresschrift für mitteldeutsche Vorgeschichte* (Halle) 34 (1950); Land Sachsen: *Arbeiten und Forschungsberichte zur sächsischen Bodendenkmalpflege* (Dresden) 1951.

³ *Hammaburg* 2 (1949) 81 ff.; Schleswig-Holstein, *Monatshefte f. Heimat u. Volkstum*, August 1950, 9.

⁴ *Kosmos* 1949, pp. 408 ff.

⁵ W. Buttler and W. Haberey (*Bandkeramische Ansiedlung Köln-Lindenthal* [1936] 66 ff.) had made the latter identification.

⁶ O. Uenze, *Steinzeitliche Grabungen und Funde in Kurhessen* (1951) 11 ff.

⁷ *Jahresschrift f. mitteldeutsche Vorgeschichte* 34 (1950) 20 ff.

⁸ *Ibid.* 33 (1949) 45 ff.

⁹ The material is being prepared for publication in the *Lüneburger Blätter* 2 (1951).

¹⁰ Publication is being prepared in *Festschrift Römisch-Germanisches Zentralmuseum* (Mainz 1952).

¹¹ *Mainzer Zeitschrift* 44 (1951) 154, fig. 7.

¹² *Ipek* 15/16 (1941-42) 76 ff. K. Bittel and A. Rieth have prepared a publication of the Heuneburg excavation.

¹³ *Offa* 8 (1949) 1 ff., plate 1.

¹⁴ *Offa* 8 (1949) 65 ff.; H. Jankuhn, *Nydam und Thorsberg* (1950) 10 f.; both with illustrations.

¹⁵ My thanks are due to the scholars named in the report for notes on unpublished finds, and to Herr Prof. G. Bersu, Frankfurt a. Main, for allowing me to refer to the proof sheets of the "Fundberichte" of *Germania* 29 (1951).

HUNGARY, 1939-1945

By DR. DINU ADAMESTEANU,

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During the years of the second world war Hungarian archaeological activity continued, with important results in the study of local problems and groups of material. The following report notices the important publications in the fields of history, religion, art, and gives a more detailed account of excavations and epigraphical publications for the period of Roman occupation.

History

A. Alföldi, *Zur Geschichte des Karpatenbeckens im I. Jahrhundert vor Christus* (Budapest-Leipzig 1942). A general study of ethnic and historical problems in the Carpathian and middle Danubian regions.

A. Alföldi, *Zu den Schicksalen Siebenbürgens im Altertum* (Budapest 1944).

A. Alföldi, "Epigraphica IV," *Archaeologiai Értesítő* 2 (1941) 30-48. A study of the term *latrunculi* found in many inscriptions of the region of *Intercisa* (Dunapentele).

J. Szilagyi, "Die röm. Okkupation von Aquincum und Nordostpannonien," *Laureae Aquincenses* 1 (1940) 287-311. An inscription, which is the oldest document of the Roman occupation in Pannonia, attests the presence of Drusus, the son of Tiberius, in the camp at Aquincum in A.D. 19-20.

Religion

Lajos Nagy, "Les symboles astraux sur les monuments funéraires de la population indigène de la Pannonie," *Laureae Aquincenses* 1 (1940) 232-43. A study of the astral symbols on a group of Pannonian monuments of the Eravisci and Azali; they are brought into relation with Celtic cults from the west and offer evidence of the religious character of the population in northeastern Pannonia.

Angelo Brelich, "Aquincum vallásos élete," *Laureae Aquincenses* 1 (1940) 20-142. A study of the cults of Aquincum (in Hungarian).

Ferdinand Lang, "Das Dolichenum von Brigetio," *Laureae Aquincenses* 2 (1941) 165-81. A study of the monument at Brigetio and of the cult of Jupiter Dolichenus in Pannonia.

A. Dobrovits, *Budapest Régiségei* 13 (1943) 47-75, 494-97. A study of the Egyptian cults at Aquincum.

Art

A. Alföldi, "Tonmodel und Reliefmedaillons aus den Donaauländer," *Laureae Aquincenses* 1 (1940) 312-41. A study of votive material of this type from Pannonia and Illyricum.

Lajos Nagy, "Prodotti di una fabbrica di Terra sigillata di Siscia ritrovati a Aquinco," *Budapest Régiségei* 14 (1945) 303-26.

Lajos Nagy, "Le vase à glaçure verte de Buda," *Budapest Régiségei* 14 (1945) 283-301.

K. Kiss, "Die Zeitfolge der Erzeugnisse des Töpfers Pacatus von Aquincum," *Laureae Aquincenses* 1 (1940) 188-228. The potter was active in the latter half of the second century A.D.

Fritz Eichler, "Nachlese zu den Sigillaten aus Brigetio in Wien," *Laureae Aquincenses* 1 (1940) 151-67.

Fritz Feemersdorf, "Rheinischer Export nach dem Donauraum," *Laureae Aquincenses* 1 (1940) 168-82.

Istvan Jordanyi-Paulovics, "Germanendarstellungen auf Pannonischen Denkmälern," *Budapest Régiségei* 14 (1945) 203-81. Utilizes iconographic and epigraphic material.

R. Egger, "Ein neuer Germanenstein," *Laureae Aquincenses* 1 (1940) 147-50. Publishes an inscription found near Vindobona which contains the dedication: *Tudro / Ariom / ani I(ü)berto an(norum) XL h(ic) s(itus) e(st)*; the patron is a Celt, but the slave a German or Celto-Illyrian.

T. Nagy, "Das Alter der Castricius-Steile," *Budapest Régiségei* 13 (1943) 463-70, 569-72. The representation of a soldier: *C. Castricius Victor* of the *Leg. II Adiutrix*, stationed at Aquincum ca. A.D. 88-92.

T. Nagy, "Rappresentazioni del carro sui monumenti sepolcrali della Pannonia Imperiale," *Archaeologiai Értesítő* 5-6 (1944-45) 210-48. The representation of chariots on gravestones is assigned to western influence.

Béla von Darnay-Dornay, "Der Grabstein des Dexter und der Iulia Prisca im Plattensee-Museum," *Archaeologiai Értesítő* 5-6 (1944-45) 169-71. The stone has representations of scenes from daily life.

Excavations

The Roman road between **Aquincum** and **Castra ad Herculem** (Brigetio) which is not mentioned in the Itineraries was studied. The investigation showed that the road was purely military and in use only during campaigns.¹ In another topographical study² J. Csalog identified **Alisca** and **Ad Latus** mentioned in the *Antonine Itinerary* with Szekszard and Szigetpuszta.

From **Carnuntum** come two funerary stelae, published by A. Betz,³ with Celto-Illyrian names: (1) *Ana Garv / onis f(ili)s an / n(orum) L h(ic) s(ita)e(st) na / tione Aravi / sscam. Curmisagius / co(n) iugi Turbo / Vercondarius / Adiutrix f(i)(ii) ex / comune p(ecunia) fec(e) runt*; (2) . . . *a Plan(Plavi ?) fi(lia) / an(norum) XXV h(ic) s(ita) e(st) / Samaconius Hel / veionis (filius) vi(v)us sibi / et con(iugi) p(ro) p(ietate)*.

The excavations and chance finds at **Brigetio** have yielded a considerable amount of archaeological ma-

terial. An inscription, published by Laszlo Barkoczi,⁴ on a sarcophagus is of particular interest: *M(arco) Ulp(io) q(uondam) Romano mil(iti) / praet(oriano) primoscrinio praef / f(ectorum), qui vi / xit an(nos) M(arcus) Ulp(ius) Celerinus sal(ariarius) / legionis (primae) ad(iutricis) / p(iae) f(idelis) interpres / Dacorum vivus sibi / et filio suo s(upra) s(cripto) carissimo / f(aciendum) c(uravit)*. The sarcophagus seems earlier in date than the inscription. This same *salariarius*, *Ulp(ius) Celerinus*, is mentioned in another inscription from Brigetio (*CIL* III 10988) and Alföldi has established the presence of another Dacian in the area of Aquincum.⁵ On the basis of the date of the inscription (ca. A.D. 200) Barkoczi considers that the interpreter's presence at Brigetio as a legionary functionary is related to the Dacian influx which, after 212, was turned towards the angle of the Danube. The style of the sarcophagus links it with the workshop at Sirmium. Barkoczi also publishes some other inscriptions from Brigetio:⁶ (1) [*Imp. Caes. Divi [Traiani] Parthici Fil. [Divi Nervae Ne]p. Traianus Aug. I Pont. M[ax] Trib. Potest. VII] I. Cos. [III Proc. . . .] Fe[ci]t*]; it is suggested that the date is 124 when Hadrian raised Aquincum and Brigetio to the grade of *municipium* on his visit to the *limes*; (2) *Matre Magne Aug. / Renn(ius) Candi[us] / Vet. Leg. I Ad. Aur. / elia Marcel / l / ina / Pro Salute Sua et / Eiorum Ex Voto / [Res]tituerunt / IV S.L.M. [.] M. /*; there was, then, a sanctuary of the *Magna Mater* at Brigetio; (3) *I(n) H(onorem) D(omus) D(ivinae) Silvano Do(mestico) [Sac.] C. Nundi / Ianus. . . .*; a dedication to Silvanus. Stephan Paulovics has written a valuable monograph presenting the material from excavations in the region of Brigetio, carried on in 1925-30 and from various local collections.⁷ It includes numerous inscriptions as well as topographical information on the *castrum* and the Roman roads in the vicinity.

At *Környe*, ca. 25 km. south of Brigetio A. Radnoti discovered a *castrum*.⁸ Its dimensions are ca. 150 by 200 m. The wall was provided with protecting bastions, regularly placed at the corners. In the wall, so far as it could be traced, were found two inscriptions: (1) *I(ovi) O(ptimo) M(aximo) / et genio hu[us]sce / loci. Pro sa / lute ddd(ominorum) nnn(ostorum trium) / M(arcus) Ael(ius) Honoratus / (centurio) leg(ionis) I adi(utricis) reg.(?) sub cura Ful(vii) Maximi co(n)-s(ularis) / v(otum) s(olvit) l(ibens) m(erito). Id(ibus) Octob(ris) / Faustino et Rufino co(n)s(ulibus)*. The date is precise, October 15, A.D. 210, as is the erasure of Geta, 212. The inscription makes an important addition to the career of Fulvius Maximus who was known to have been stationed as *legatus propraetore* in Upper Germany about the end of the second century (*CIL* XIII 8007 = *ILS* 1195); (2) *[Iul(iae) Aquili]ae / [Severae] sanc / tissimae Aug(ustae) / matri*

castro / rum senatus ac patria. Ordo mun(icipii) B[ri]g(etionis). This is the only inscription known for the second wife of Elagabalus and follows in its epithet, *mater castrorum*, the old imperial formula. Apparently these inscriptions were carried from Brigetio to form a part of the building material for the construction of the camp at Környe. It is dated to the early third century and its relation to the camp recently excavated at Sagvar (not yet published) and to that at Fenekpuszta leads to the conclusion that, beyond the former line of the *limes*, there ought to be another series of fortifications in that line which Caracalla chose for the frontier between Upper and Lower Pannonia. There was, then, a line on which all the camps were erected in this period of the division, and on the importance of which Hungarian archaeology is now assured.

Of much more importance were the excavations carried out at *Aquincum*, 1936-43, under the supervision of L. Nagy and I. Szilagyi. The aim of the excavation was to uncover the "second" amphitheater, to trace the circuit wall of the camp and to clarify many obscure points of topography in the ancient city. The site of the amphitheater was cleared with good results and much epigraphical and architectural material has been published.⁹ It was established that the district of Szentendre had first a flourishing Illyrian colony, then became a fortress in the Roman period. A tower of the fortress was excavated, in the foundation of which was found an inscription: *D.M. Henuodus an(num) (I) m(ensem) I, Felix p(ater) posuit*. In the area around the camp were many Roman graves and inscriptions among which may be mentioned: (1) a dedication: *Pro salute domini nostri Aur(elius) Elianus dupl(iciarius)*; (2) an altar dedicated to Jupiter and Juno; (3) a group of Mithraic monuments; (4) a dedication to Aesculapius and Hygieia; (5) a dedication to Telesphorus, made by *T(itus) Fl(avius) Priscus, vet(eranus) Leg. IIII Flavia, ex opt(ione) val(etudinarii)*; (6) the inscription of a native, *Publius Aelius Valerianus*, a soldier of the *Coh. Numidarum*. One result of the excavation was to fix the site of the military hospital of the local camp in the Florianplatz.¹⁰ The *collegium centonarium*, built about the middle of the second century after Christ in the civilian section of Aquincum, was discovered in the excavations of 1941.¹¹ The *collegium fabrum* in the military area was already known through its monuments. A large palace, probably that of the governor, was also discovered.¹²

T. Nagy has restudied the inscription, *CIL* III 13382, from Aquincum, which is important for the introduction of Christianity into this region.¹³ The stone is assigned to the first half of the fourth century and the woman, whose death it records, to the region between Sirmium and Cibalae. Her husband was sta-

tioned at Aquincum on military duty. The character of Pannonian Christianity was eastern, to judge from the stylistic character of the stone and from the linguistic forms met in this region; probably it came to Aquincum from Sirmium into which center the new religion had already penetrated. The first region to feel the new influences was lower Pannonia, the future province of Valeria. As a result of these excavations and studies Aquincum is the best known of the Pannonian sites.

The foundation of the camp at **Emona** has also been finally established. Since the *Monumentum Ancyranum* does not refer to an Augustan occupation of Illyria it had been thought that Emona was later than that period, but excavation has shown that it is Augustan. The dimensions of the camp were 522.30 by 435.50 m., which is sufficient for a legion and some auxiliary troops. An inscription¹⁴ reveals that in the period of Tiberius the *Legio XV Apollinaris* was stationed there: *T(itus). Iunius. f(ilius) Ani(en)sis. Montanus. tr(ibunus). mil(itum) VI praef(ectus) equit(um). VI praef(ectus) fabr(um). II pro leg(ato). II.* This inscription, considered with that published by J. Szilagyi, thus sets the date of the incorporation of Pannonia into the large organization of Illyricum.

Moesia

Large scale excavation was carried on at **Pliska**, a site investigated in part forty years ago; it is of particular importance for the study of the early Slavic population under the Byzantine and Bulgarian régimes of the early medieval period. Certain general works have been published, of use for both the Greek and Roman periods of occupation in the region;¹⁵ in particular, painting of the Roman period,¹⁶ and the *limes* of Moesia Superior.¹⁷ In connection with the latter A. Barcaila made some interesting discoveries at **Transdierna** and **Pontes**.¹⁸ The dimensions of the camp of Transdierna (Tekija) were found to be 100 by 94 m.; in the camp a statue bearing a dedication: *Iunoni Reginae Ulp. Ant. Quintus Dec. / Aedilic. Quaest. M.D. Ob / Honor. Q(uin)q(uennal)itatis Portus* was found. It evidently belongs to the *municipium Diernense* to which *CIL* III 8009 should also be ascribed. From the same camp came a Mithraic monument of good local manufacture. The dimensions of the camp at Pontes (Costol) were 120 by 120 m.; a study was made of the pilasters of the bridge of Trajan, better preserved on the Yugoslavian side of the river than on the Rumanian. Stamps of the *Coh. III Brittonum* were found in the material of the bridge.

In **Odessa** (Varna) one of the towers of the Roman city and some private houses were excavated systematically as the result of a chance discovery during a public works operation; a heating system was also

discovered in a house.¹⁹ From the same region a large collection of archaeological material, Thracian sarcophagi, and Greek and Latin inscriptions, has been published by K. Skorpič;²⁰ it is particularly interesting to note the large number of Thracians taken into the city during its Hellenistic period.

¹⁴ A. Zambra, "La strada romana del Dobogókő," *Archaeologiai Értesítő* 3 (1942) 259; A. Alföldi jr. and L. Radnai, "La strada militare romana del Dobogókő," *ibid.* 5-6 (1944-45) 201-13.

¹⁵ "Alisca-Ad Latus," *ibid.* 2 (1941) 103-05.

¹⁶ A. Betz, "Illyrisch-Keltisches aus dem Ager Carnuntinus," *Laureae Aquincenses* 1 (1940) 3-7.

¹⁷ "Ein dakischer Dolmetscher in Brigetio," *Archaeologiai Értesítő* 5-6 (1944-45) 178-92.

¹⁸ *Budapest Története* 1 (1943) 141 ff.

¹⁹ *Archaeologiai Értesítő* 5-6 (1944-45) 172-77.

²⁰ *Laureae Aquincenses* 2 (1941) 118-64.

²¹ "Le camp romain et les monuments épigraphiques de Környe," *ibid.* 2 (1941) 77-105 (in Hungarian and French).

²² *Studien aus der Vergangenheit der Stadt Budapest* 8 (1941); *Budapest Régiségei* 13 (1943) 339-57, 528-35.

²³ *Ibid.* 395 ff., 555 ff.

²⁴ *Ibid.* 534-35; *ibid.* 14 (1945) 463-67; *Laureae Aquincenses* 2 (1941) 182-221 (in Hungarian and French).

²⁵ *Budapest Régiségei* 13 (1943) 374 ff., 544 ff.

²⁶ "Un monument méconnu du Christianisme d'Aquincum," *Archaeologiai Értesítő* 5-6 (1944-45) 265-82.

²⁷ B. Saria, "Emona als Standlager der Legio XV Apollinaris," *Laureae Aquincenses* 1 (1940) 244-55.

²⁸ G. Mihailov, *Die griechische Epigramme aus bulgarischen Ländern* (Sophia 1944); useful for both the period of Greek colonization and for the late Roman period; see also C. Patsch, "Der Kampf um den Donaauraum unter Domitian und Trajan," *SB. Wien. Akad.* 217 (1940) 252 ff.

²⁹ A. Frova, *Pittura Romana in Bulgaria* (Rome 1943); deals mainly with material from Scythia Minor, but utilizes some also from Moesia and Serdica.

³⁰ E. Swoboda, "Forschungen am obermoesischen Limes," *Schriften der Balkankommission, Antiquarische Abteilung* 10 (1939); a comprehensive study of Romanization and of the *limes* on the Danube from Cuppae (Golubac) to Transdierna (Tekija). See also in this connection H. U. Instinsky, "Zur Interpretation der Tabula Trajana," *Jahreshefte* 35 (1943), *Beiblatt*, 33-38.

³¹ A. Barcaila, "Nouvelles archéologiques de la région des Portes-de-Fer: Drubeta-Transdrubeta-Transdierna," *Buletinul Comisiunii Monumentelor Istorice* 32 (1939) 157-74.

³² S. Pokrovski, "Ausgrabung aus dem römischen Turm in Varna," *Bulletin de l'Institut Archéologique Bulgare* 14 (1940-42) 222-27.

³³ "Antike Denkmäler aus dem westlichen Küstengebiet des Schwarzen Meeres," *ibid.* 8-53.

FINLAND¹

C. F. Meinander and M. Dreijer excavated a late Bronze Age sealing settlement at **Otterbötte**, Kökar

Parish, Åland. Circular huts with nearby middens containing primitive pottery and animal bones, mainly seal, were excavated. These are the first Bronze Age houses found in Finland.

Dr. Helmer Salmo excavated a series of Roman (second century A.D.) graves in a cemetery at **Kärsämäki**, St. Marie Parish, near Åbo. Some skeletons were found, others had been cremated. The grave furniture indicates cultural contacts with Prussia and Sweden. The first graves in this cemetery were opened during 1920-30 (Helmer Salmo, "Maarian Kärsämäen

roomalaisaikainen kalmisto," *Suomen Museo* 1930). Excavations are being continued in 1951.

Jorma Leppäaho excavated a cemetery with inhumation graves of the late Viking period and the period of the Crusades to Finland, ca. 1000-1200, at **Rikala**, Halikko Parish near Salo. Work is being continued during 1951.

¹ These notes were contributed through the kindness of Dr. Henry Field.

THIRD INTERNATIONAL CONGRESS OF PREHISTORIC AND PROTOHISTORIC STUDIES AT ZURICH, AUGUST, 1950.

The following notices are a partial report of the proceedings of the Congress. For the material on which they are based the *Journal* is indebted to Dr. Henry Field. The notices have been prepared by Professor Carl A. Roebuck.

G. Mortelmans, "Vue d'ensemble sur le Quaternaire du bassin du Congo." A provisional synthesis of the material for the period from the geological, morphological, palaeoclimatic and prehistoric approaches. The following archaeological conclusions are drawn: (1) the Congo basin is scarcely to be distinguished from the other south-equatorial regions of Africa up to the end of the Acheulian period; (2) forest cultures of Sangoen type with Kalinian industry enter the area at the beginning of the Pleistocene; (3) after Kalinian, there is regional diversity; (4) after the Pleistocene, the Congo basin is divided into three great cultural regions: final Tskitolian in the southwest, Mesolithic in the south and southeast, Neolithic, with Sudanese affinities, in the north.

C. B. M. McBurney, "The Geological Age of the First Blade Industries in Cyrenaica." Approximately 120 miles of coastline were examined for traces of ancient shore lines of Pleistocene date. Strong reasons were found for correlating the fresh water marines and tufas with Wurm I; they contained Levallois-Mousterian material identical with the Palestinian facies; the consolidated alluvia were correlated with Wurm II; they contained traces of a coarser Levalloisian industrial tradition. Two cave deposits some miles inland provided evidence of a blade tradition of early Mesolithic or Upper Palaeolithic character. The earliest possible date for the arrival of blade industries in the Gebel Akhdar is subsequent to Wurm II.

C. B. M. McBurney, "Statistical Aspects of the Mousterian and Other Flake-industries in Western Europe." Tests were applied to determine the nature of the grosser differences between European Cave Mousterian, Levallois, and Clactonian and to throw

light on their functional significance. Mousterian technique achieved an output of flakes of a given length and breadth at not more than 60-70% of the consumption of raw material required by Clactonian industries. Levalloisian represented closely the same order of economy of raw material as Mousterian.

Raffaello Battaglia, "Le Ossa Musteriane Lavorate della Caverna Pocala (Trieste)." Remains in the Caverna Pocala and in some other caves of Liguria and the Alpi Apuane should be assigned to an "Alpine Mousterian" culture rather than to an "Alpine Palaeolithic." The bones of bear and other fossil mammals from the Pocala cave, which were certainly used as tools, are discussed in justification of the author's thesis.

Raffaello Battaglia, "Sull' Età dell' Uomo Fossile di Quinzano (Verona)." The bones, in a state of advanced fossilization, show a morphology similar to those of the fossilized remains of the Upper Pleistocene, in some particulars to the skulls of Piltown and Swanscombe. The type of fossilization corresponds to that of the bones of *Megaceros* and *Elephas* found in lower levels V and VII associated with Mousterian industry.

Alberto Carlo Blanc, "Géochronologie des gisements paléolithiques de Saccopastore et du Mont Circé." Examination of the chronological correlation between the fossil remains of Saccopastore (Rome) and Mont Circé, based on new excavations in the Guattari and Fossellone caves on Mt. Circé and on morphological and stratigraphical investigations in the lower valley of the Tiber and the coast to the southeast of Mt. Circé. The remains in the Guattari cave are exclusively Mousterian of Pontinian type. This cave was used only by Neanderthal man and was closed when Aurignacian man was using the Fossellone cave.

M. S. Almgren, "La Cronologia del Arte Levantino de España." Questions the "orthodox" dating of the rock paintings in the Palaeolithic period, advanced

first by Breuil and Obermaier, and points to the work on the material by Spanish scholars.

J. L. Baudet, "Painted and Engraved Caves in the Ile-de-France." In the caves in the *départements* near Paris, Palaeolithic, Mesolithic, Neolithic, and Proto-historic decorations are found; they are dated by the objects from the caves. Similarities of decoration to that of other western and central European caves are pointed out.

Grahame Clark, "Excavations at an Early Mesolithic Site at Seamer, Yorkshire, England (1949-50)." The settlement, on the margin of a lake of Late Glacial origin, is dated from the Pre-Boreal phase of Post-glacial time (Jessen Zone IV). Organic materials in the form of birch brushwood flooring were discovered and tested by the radio-carbon method. An average age of 9488 ± 350 years was obtained, which fits well within the conventional dates of Zone IV (6800-8000 B.C.). The site produced antler bone artifacts as well as those of flint, similar to finds from Klosterland in Denmark. The site gives the most complete picture yet available in northwestern Europe about conditions of life in the birch forests from the beginning of the Post-glacial period.

C. J. Becker, "Die Maglemosekultur in Dänemark, Neue Funde und Ergebnisse." It is apparent that the Maglemose Culture as a whole is to be divided into a series of separate groups showing very perceptible differences in material culture. In Denmark, several local groups may be distinguished. Recently made finds in Denmark are discussed in relation to the culture.

Carl-Axel Althin, "The Mesolithic Age in Sweden." The author's excavations have enabled the tracing of the main lines of the development of the Mesolithic Cultures in south Sweden from the pre-Boreal phase to the Neolithic, sub-Boreal period. The development falls into three phases: the fen culture (Ageröd I), the lower coastal culture, and the upper coastal culture extending into Neolithic. Large parts of south Sweden were occupied during the lower coastal culture. Out of the upper coastal culture a new fisher-farmer culture was formed, the "pitted-ware" culture.

Märta Magnusson-Strömberg, "Neugefundene Flachgräber aus der Steinkistenzeit in Südschweden." The new graves were found in eastern and south-eastern Skåne, the southernmost province of Sweden, where about 200 stone cists are known. The new graves were completely under the surface of the ground; they will entail revision of the chronology of the Stone Age in the area.

H.-G. Bandi, "Die Obsidianindustrie von Bandung, ein Seitenzweig des indonesischen Toalien (?)." Discussion of the obsidian objects from Indonesia in the Museum für Völkerkunde in Basel. They are of small

types and of Mesolithic date. The obsidian industry in Bandung in western Java is connected with the culture of Leuwiliang (Buitenzorg) and the obsidian finds in Sumatra; all are related to the Proto-Toalian of the Celebes, probably entering Java before 2500 B.C.

L.-R. Nougier, "Problèmes du Néolithique Occidental." Western Neolithic, in the broad sense, has recently benefited from important work which permits valid generalizations. Particularly noted are greater clarity in the use of descriptive terms; in western Europe two great civilizations characterize the Neolithic period; the Campanian and the Lacustrine. The areas and the chronological limits of these are discussed and suggestions offered for further study.

Milutin Garašanin, "L'État actuel, les problèmes, et les perspectives de développement des études préhistoriques dans la vallée de la Morava." The excavations in the valley of the Morava in Serbia allow a clear picture of prehistoric life in that region to be made. As yet no Palaeolithic has been found; Neolithic is represented by the sites at Starčeno and Vinča, while there is late Neolithic at Pločnik and other stations. Bronze Age material is found at Bubanj-Hum, but the Late Bronze Age and Hallstatt are not well represented. It would be desirable to study the relations of the region with the south by the Vardar valley.

Otto-Friedrich Gandert, "Neolithische Gräber mit Rinderbeigaben und Rinderbestattungen in Mitteleuropa." A study of the human graves with offerings of cattle, and of the separate graves for cattle in Central Europe. Cattle must have had an important place in the economic life and the spiritual world of the Nordic megalithic culture with which such burials are associated. The feminine character and the Mediterranean connections of the culture are discussed.

Seán P. Ó Ríordáin, "New Evidence on Neolithic and Early Bronze Age Pottery in Ireland." The sites excavated at Lough Gur in County Limerick are described. In them large amounts of pottery were found, and opportunities were present for stratigraphical study and the association of the pottery with house and burial types. A large number of Beaker sherds were found, which have parallels in Somerset, Scotland and on the Continent. On the basis of the evidence from these sites it was possible to fill in the gap between the Neolithic and Late Bronze Age.

Ernst Sprockhoff, "Pfahlbaubronzen in der Südzone des nordischen Kreises während der jüngeren Bronzezeit." A discussion of the export of bronze arms and tools of the Lake-dwellers of the later Urn Field period—types and geographical distribution.

Gero v. Merhart, "Blechgefäße und Chronologie der Spätbronze- und Früheisenzeit Mitteleuropas." A discussion of the cultural and chronological relations of Central Europe in the period 1100-450 B.C., with

notice of the connections with Italian cultures and the recent treatments of Akerström, Dohan, and Dunbabin.

M.-E. Mariën, "Some Discoveries of the Late Bronze Age in the Meuse Basin, Belgium." A general review of the whole Late Bronze Age in Belgium. Towards the end of the Middle Bronze Age the Schelde basin was occupied by a warlike people, attested by the discovery of rapier swords. Their descendants continued to occupy the region in the Late Bronze Age and enjoyed close commercial relations with northwest France. The Meuse basin, however, looked rather to the south, to the Juras. In neither area are bronze finds common. North Belgium forms a third component, but its relationship to the Schelde culture is not yet fixed. The latter remained undisturbed during the Hallstatt C period.

Sverre Maistrander, "New Rock-carvings of Bronze-age Type in the District of Trøndelag, Norway." The rock-carvings are on the shore of Lake Selbusjøen, about 30 kilometers southwest of Trondheim. They differ in many respects from the group known in the Trøndelag District. The carvings were made on granite boulders at a considerable distance from the fields tilled by their carvers. The carvings date from the latter part of the Nordic Bronze Age; they represent foot prints, distinctly formed figures of ships resembling those on the Danish bronze razors, and "magic hands." The latter are very rare in other Norwegian carvings.

J. W. Brailsford, "The Origin of the British Overhanging-Rim Urn: Some New Evidence." The new evidence is a group of pottery from a pond-barrow on Sheep Down near Winterbourne Steepleton in Dorset. The pots are of Middle Bronze Age fabric and apparently represent the genesis of the overhanging-rim urn.

E. Patte, "Un nouveau site à Bandkeramik en France." Discusses two Bandkeramik vases found in burials near Menneville (Aisne) and the routes followed by the makers of such pottery.

Raffaello Battaglia, "Su due rari Oggetti di Bronze della Palafitta di Ledro (Trento)." The objects in question are two large rings, open at one end and terminating in two lateral extensions of rectangular form which give the shape of a T to their ends. The rings are decorated with incised geometric motives. They are considered to have been used for personal adornment, probably for the head. The objects are unique in European prehistoric material.

Walter Drach, "Die frühe Eisenzeit der Schweiz im Ueberblick." A review of the prehistoric cultures in Switzerland from the eighth to the fifth centuries B.C. The Hallstatt period is the gateway to Swiss history, for in it separate culture groups may be distinguished whose bearers can be identified with folk names.

Ernst Sprockhoff, "Die Jastorfkultur, eine methodische Frage." Discussion of the chronology and the cultural affinities of the Jastorf Culture. Its beginning is placed, at the earliest, at the start of the fifth century B.C.; it is purely of the La Tène period and stands under direct Celtic influence.

T. M. Thurzen, "Some New Light on the Iron Age of the West Midlands and Welsh Marches." Report on excavations carried out at the hill fort of Sutton Walls in Herefordshire. The summit was defended by a massive, single rampart and ditch which were investigated. The pottery from the site closely parallels that from Bredon Hill but the building technique is different. The significance of the discovery for British Iron Age B is discussed: it is probable that no actual B groups penetrated the region.

P. J. R. Modderman, "Sea Level Changes and Archaeology in the Netherlands." Settlements of prehistoric, Roman and mediaeval date are correlated with the successive transgressions and regressions of the sea level. These would have had some influence also on the vegetation—a transgression should mean a general increase of water by which the growth of peat has been renewed.

Anne Roes, "Iranian Elements in Hallstatt and Villanova Art." The importance of the role of Luristan in the distribution of Early Iron Age *motifs* is rejected on the grounds that they were shared by Achaemenid art. The *motifs*, symbolic in character, are considered to have originated in an Iranian solar cult which spread to Armenia and Cappadocia. The recrudescence of the *motifs* in Islamic and mediaeval European art is noticed.

M. E. Salin, "Musée historique Lorrain." Describes the function of a laboratory for archaeological research set up in the Musée historique Lorrain at Nancy. The work carried on up to the present has largely been with glass and iron. The glass studied, of the sixth century, is probably the product of the workshops of the School of Cologne. The iron studies have dealt with the damascening and technique of the armament of the period of the barbarian invasions.

Joachim Werner, "Ein langobardischer Schild von Ischl an der Alz, Gem. Seon (Oberbayern)." Discusses the richly decorated shield of Italian origin found during the last century at Ischl an der Alz in Bavaria. It is one of the products of the intercourse between north Italy and that region through the Brenner Pass in the seventh century A.D.

Jože Kastelic, "Archaeological Finds at Bled in Slovenia, Yugoslavia." An extensive burial ground was excavated. It consisted of two parts: the first belonged to the culture of Körtlach, ninth and tenth centuries A.D.; the second, with affinities to Reichenhall in Bavaria and to Alsópáhok near Lake Balaton, to the seventh and eighth centuries. In the lowest

stratum were thirty-six cremation burials dating from the fifth century B.C.

J. R. C. Hamilton, "Excavation of a Viking Settlement at Jarlshof, Shetland." The object of the present excavations was to determine the inter-relationship of the nine Viking houses previously excavated. It was found that an earlier settlement had been established by A.D. 800-850, probably by colonists from the Møre and Agder districts of Norway. The later houses were occupied in the twelfth and thirteenth centuries. The chief activity of the settlement was fishing, and life was predominantly peaceful with the earlier settlement taking little part in the Viking raids to the south.

Graziella M. Guarnieri, "Osservazioni sulla Statura delle Antiche Popolazioni Italiane." A study based on skeletal remains mainly from the district of Venezia Giulia in the private collection of Professor R. Battaglia. The material is summarized in tabular form and comparisons made with that from other areas.

S. Giedion, "Prehistoric and Contemporary Means of Artistic Expression." A proposal that the Congress form a small committee of prehistorians interested in the artistic aspects of prehistory for the making and collection of photographic reproductions of prehistoric

art, and for the assembling in one place of copies of all existing material. The committee formed in a special meeting consisted of: Prof. Herbert Kühn (Mayence), President; Mlle. Danthine (Brussels), Secretary.

M. E. Mariën, "Projet de recueil de trouvailles d'ensemble relatifs aux âges des métaux et comportant des éléments à valeur chronologique." Points out the desirability of collecting material published in local journals and thus available only for local use. It is suggested that it be published on thin paper, perforated on the margin to enable proper filing. Practical suggestions for perforation and format were advanced. A central committee with regional representatives was proposed to supervise the work.

B. H. O'Neil, "The Conservation of Prehistoric Monuments in Great Britain." The provisions and procedures observed by the Ministry of Works for the preservation of monuments are discussed; particular reference to the Orkneys is made.

H.-G. Bandi, "Die Verwendung von Fliegeraufnahmen für die Vor- und Frühgeschichtsforschung in der Schweiz." Useful results have been obtained from the employment of air photography for prehistoric studies in Switzerland through the co-operation of the Swiss Society for Prehistory and the military aviation.

ANNOUNCEMENT: SECOND INTERNATIONAL CONGRESS OF GREEK AND LATIN EPIGRAPHY, 1952

Announcement has been made that the Second International Congress of Greek and Latin Epigraphy, which continues the tradition established with the meeting of the First Congress at Amsterdam in 1938, will meet in Paris, at the Collège de France, on 15-19 April 1952. The Committee which is organizing the Congress consists of: Louis Robert, President; Robert Flacelière, Secretary-Treasurer; J. M. R. Cormack, Attilio Degraffi, Sterling Dow, Charles Edson, Margherita Guarducci, Josef Keil, Günther Klaffenbach, Herbert Nesselhauf, André Piganiol, and Ronald Syme. Correspondence should be addressed to the President, Louis Robert, 31, Avenue du Parc Montsouris, Paris 14.

ARCHAEOLOGICAL BIBLIOGRAPHY

C. BRADFORD WELLES

At the suggestion of some readers, the former geographical arrangement of entries has been replaced by a topical one, which will be useful, it is hoped, and which is as consistent as seems useful. It will be noted that, after some not very successful attempts, the practice of listing books in the Bibliography has been discontinued. The author will, as previously, appreciate his attention being called to omissions of pertinent material; they will be rectified in a subsequent issue. While the Bibliography is designed to serve the current needs of readers, and not to serve as a permanent record of progress in the field, completeness in the area covered is desired *kata to anthropinon*. The Far East and the Americas are not reviewed systematically; for the latter, the *Journal* provides coverage in the annual "American News."

The following journals have been abstracted in this issue: *Aegyptus* 30 (1950); *American Journal of Archaeology* 54, No. 4 (1950); *American Journal of Philology* 72, No. 1 (1951); *Ampurias* 11 (1949); *Annual of the British School at Athens* 45 (1950); *Antiquaries Journal* 30 (1950); *Antiquitas Hungarica* 3 (1949); *Antiquité Classique* 19 (1950); *Antiquity* 24 (1950); *Archaeologia Austriaca* 5 (1950); *Archiv Orientální* 18 (1950); *Armenian Affairs* 1, Nos. 3/4 (1950); *Athenaeum* 28 (1950); *Belleten Türk Tarih Kurumu* 14 (1950); *Biblical Archaeologist* 13, No. 4 (Dec. 1950); 14, No. 1 (1951); *Boletín de la Sociedad Arqueológica Luliana* 30 (1949); *Bolletín Arqueológico (Tarragona)* 4, Fasc. 31 (1950); *Bulletin of the American Schools of Oriental Research* 120 (Dec. 1950); 121 (Feb. 1951); *Bulletin of the Metropolitan Museum of Art* Feb. 1951; *Carinthia I* 140 (1950); *Classical Philology* 46, No. 1 (1951); *Classical Quarterly* 44, Nos. 3/4 (1950); *Germania* 28 (1944-1950); *Hesperia* 19, No. 4 (1950); *Illustrated London News*, Jan.-Mar. 1951; *Iraq* 12 (1950); *Jahrbuch der Schweizerischen Gesellschaft für Urgeschichte* 40 (1949/50); *Journal of the American Oriental Society* 71, No. 1 (1951); *Journal of Cuneiform Studies* 4, No. 3 (1950); *Journal of Egyptian Archaeology* 36 (1950); *Journal of Hellenic Studies* 69 (1949); 70 (1950); *Journal of Juristic Papyrology* 4 (1950); *La Nouvelle Clío* 1/2, Nos. 5/6 (May-June 1950); *Mnemosyne*, Ser. 4, 3, No. 4 (1950); *Museum Helveticum* 7 (1950); *Opuscula Archaeologica* 6 (1950); *Orientalia* 19, Nos. 3/4 (1950); 20, No. 1 (1951); *Palestine Exploration Quarterly* 82 (1950); *Papers of the British School at Rome* 18 (1950); *Quarterly of the Department of Antiquities in Palestine* 14 (1950); *Record of the Art Museum, Princeton University* 9, No. 2 (1950); *Revue Belge d'Archéologie et d'Histoire d'Art* 19 (1950); *Revue Belge de Philologie et d'Histoire* 28 (1950); *Revue Biblique* 57 (1950); *Revue des Études Grecques* 63 (1950); *Rivista di Studi*

Liguri 16 (1950); *Ulster Journal of Archaeology* 12 (1949); *Würzburger Jahrbücher für Altertumswissenschaft* 4 (1949/50).

For the abbreviations used, see *AJA* 54 (1950) 269-272, and (for abbreviations adopted since the publication of that list) recent instalments of the Bibliography. New abbreviations adopted beginning with this issue are: *RSLig* = *Rivista di Studi Liguri*; *WJA* = *Würzburger Jahrbücher für Altertumswissenschaft*.

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GENERAL

Gnomon 22, Nos. 5-6 (1950) includes a number of important archaeological reviews: Grant, *From Im-*

perium to Auctoritas (F. Vittinghoff); Bulle, *Geleise-strassen des Altertums* (R. Nierhaus); Bloesch, *Antike Kunst in der Schweiz* (H. Möbius); Kähler, *Der grosse Fries von Pergamon*; *id.*, *Pergamon* (G. Kleiner); Milošević, *Chronologie der jüngeren Steinzeit Mittel- und Südosteuropas* (V. G. Childe) (260-292).

M. Louis, "Au sujet des races humaines de l'époque néolithique," *RS Lig* 16 (1950) 12-24. The "grotto-people" were smaller than the "dolmen-people," and brought a polished stone culture from the East.

V. I. Avdiev, "Caucasus and the Culture of the Ancient East," *AO* 18 (1950) 25-68. Includes the new Urartian material from near Erevan.

A. Alföldi, "Der iranische Weltreise auf archäologischen Denkmälern," *Jahrb. d. Schweizerischen Gesellschaft für Urgeschichte* 40 (1949/50) 17-34, pls. 10. Suggested by a votive plaque recently published by R. Dussaud from Luristan, of the thirteenth century B.C. Association of the cock and the horse with the World Spirit and with the King in Iranian religion, and their transmission to the West.

Carlos Cid Priego, "El sepulcro de torre mediterráneo y sus relaciones con la tipología monumental," *Ampurias* 11 (1949) 91-126. From the pyramids and Palmyra to Spain.

Martin P. Nilsson, "Lampen und Kerzen im Kult der Antike," *OpusArch* 6 (1950) 96-111. In Minoan times, then later victorious over torches, especially in new cults (Ruler cults).

R. W. Hamilton, "The Sculpture of Living Forms at Khirbat al-Mafjar," *QDAP* 14 (1950) 100-119. Birds, animals, and men.

J. M. C. Toynbee, J. B. Ward Perkins, "Peopled Scrolls: A Hellenistic Motif in Imperial Art," *PBSR* 18 (1950) 1-43. Development and spread of types and individual figures; appearance in monumental art usually based on continuing tradition in minor arts, especially in East Roman provinces.

S. Pelekanides, "Christian Capitals with Wind-Blown Leaves," *Macedonica* (Publication of the Society of Macedonian Studies) 2 (1949) 1-12. In Greek.

Dictionary of Ceramic Terms (Jerusalem, 1950). Pp. 96, pls. 10. Equivalents in Hebrew, English, French, and German. Includes terms relating to technical processes, gross forms and details, and ornamentation; well illustrated.

Hans Deringer, "Die römische Reichsstrasse Aquileia-Lauriacum," *Carinthia I* 140 (1950) 171-228.

Arnold Toynbee, "Greek Light on World History," *ABSA* 45 (1950) 1-15. Supposed parallels.

THE ANCIENT NEAR EAST

The *Jaarbericht* No. 11 of the Vooraziatisch-Egyptisch Genootschap "Ex Oriente Lux" has appeared with its usual full and interesting survey of progress in Near Eastern archaeology.

Anatolia, Mesopotamia, and the Levant

Excavations and Finds

S. Moscati, "Bibliographie sémitique, 3," *Orientalia* 19, No. 4 (1950) 445-478.

Robert and Linda Braidwood, "Jarmo: A Village of Early Farmers in Iraq," *Antiquity* 24 (1950) 189-195. Pre-pottery village, probably close to the beginnings of food-production; tentatively dated by Carbon 14 to 5270-4630 B.C.

M. Dunand, "Chronologie des plus anciennes installations de Byblos," *RBibl* 57 (1950) 583-603. Six earliest levels described and correlated with Egypt, Syria, and Mesopotamia, ranging from pre-Halaf to Third Dynasty in Egypt.

Kathleen M. Kenyon, "Palestinian Excavations," *Antiquity* 24 (1950) 196-200. Review of recent publications of Beth-Shan, Megiddo, and Tell-en-Nasbeh.

B. S. J. Isserlin, "Some Archaeological News from Israel," *PEQ* 82 (1950) 92-101. Summary of work since the formation of Israel.

Olga Tufnell, "Excavations at Tell Ed-Duweir, Palestine, Directed by the Late J. L. Starkey, 1932-1938," *ibid.* 65-80. Levels VI-II of Iron Age (1200-600 B.C.). Brief description of buildings and objects, and attempt to correlate levels with known historical events.

B. S. J. Isserlin, Olga Tufnell, "The City Deposits at Tell Ed-Duweir: A Summary of the Stratification," *ibid.* 81-91. Two soundings, one Early to Late Bronze, one Iron Age. Architectural remains and pottery.

I. Ben-Dor, "A Middle Bronze-Age Temple at Nahariya," *QDAP* 14 (1950) 1-41. Excavated in 1947. A temple of Ashtoreth, particularly rich in pottery. J. Waechter, "Note on the Flints from Nahariya," *ibid.* 43.

G. Lankester Harding, "An Iron-Age Tomb at Meqabelein," *ibid.* 44-48. Of the second half of the seventh century B.C. A plate in color illustrates a chalcedony seal, a blue-glass vase, and a horse and rider in red pottery.

M. E. L. Mallowan, "The Excavations at Nimrud (Kalhu), 1949-1950," *Iraq* 12 (1950) 147-183. Governor's palace of Adad-nirari III, and archives.

J. du Plat Taylor, M. V. Seton Williams, J. Waechter, "The Excavations at Sakce Gözü," *ibid.* 53-138. Neolithic to Early Christian.

Muzaffer Süleyman Şenyürek, "A Note on three Skulls from Alaca-Höyük," *Belleten* 14 (1950) 57-84 (Turkish and English).

Paul Leslie Garber, "Reconstructing Solomon's Temple," *BiblArch* 14, No. 1 (1951) 2-28. Description of a model made by E. G. Howland according to the latest information.

C. N. Johns, "The Citadel, Jerusalem. A Summary of Work since 1934," *QDAP* 14 (1950) 121-190. Re-

covery of the history from Jewish times to the Mamlukes of the fourteenth century, with plans and rich illustrations.

E. Douglas Van Buren, "An Enlargement on a given Theme," *Orientalia* 20, No. 1 (1951) 15-69. Examination of goat offerings in early Mesopotamia: not a part of the regular sacrifices of the temples, the goat was offered, not necessarily for sacrifice, to a variety of deities by human and divine individuals on special occasions in recognition of benefits received or in hope of benefits to come.

E. Douglas Van Buren, "Amulets, Symbols or Idols?" *Iraq* 12 (1950) 139-146. Discussion of "eye idols," with various theories as to their meaning and use; suggests, after Andrae, that they represent reed huts surmounted by gate-post symbols.

N. Schneider, "Göttertempel im Ur III-Reich," *Orientalia* 19, No. 3 (1950) 257-264. Enormous number of temples; names collected with references.

Donald N. Wilber, "A Relief from Persepolis," *Record of the Art Museum, Princeton University* 9, No. 2 (1950) 2 f. Slab from a balustrade with figure of tribute-bearer, from the Brummer collection.

A. Jamme, P. B., "A New Chronology of the Qatabanian Kingdom," *BASOR* 120 (Dec. 1950) 26 f. Preliminary results of the latest expedition.

Cuneiform and other non-Greek Inscriptions

A. Pohl, "Keilschriftbibliographie. 13," *Orientalia* 20, No. 1 (1951) 78-87.

I. J. Gelb, "Šullat and Ḥaniš," *AO* 18 (1950) 189-198. Destructive Sumerian gods, on a new Sumerian tablet in the Oriental Institute.

Francis Rue Steele, "An additional Fragment of the Lipit-Ishtar Code Tablet from Nippur," *ibid.* 488-493. Obscure passages dealing with rental of boats and gardens.

Jørgen Laessle, "On the Fragments of the Hammurabi Code," *JCS* 4, No. 3 (1950) 173-187.

Cyrus H. Gordon, "Šamši-Adad's Military Texts from Mari," *AO* 18 (1950) 199-207. Revealing a king of ability.

W. F. Albright, William L. Moran, S. J., "Rib-Adda of Byblos and the Affairs of Tyre," *JCS* 4, No. 3 (1950) 163-168. Amarna Tablet 89 in a new edition.

B. Landsberger, K. Balkan, "Die Inschrift des assyrischen Königs Išrūm, gefunden in Kültepe 1948," *Belleten* 14 (1950) 171-268 (Turkish and German). Dedications to Assur protected by curses. A long and important text.

B. Landsberger, "Kommt Ḥattum 'Hettiterland' und Ḥattūm 'Hettiter' in den Kültepetafeln vor?" *AO* 18 (1950) 329-350. Survey of the problem.

W. F. Albright, "The Hebrew Expression for 'Making a Covenant' in Pre-Israelite Documents," *BASOR*

121 (Feb. 1951) 21 f. In the Qatna inventories. "Cutting," as in Greek also.

Roger Goossens, "À propos des inscriptions de Karatepe," *La Nouvelle Cléo* 1/2, Nos. 5/6 (May-June 1950) 201-205. Etymology of Kelenderis, and Cilician connections of Aspendos. Ernest Honigmann, "Les noms des fleuves ciliciens Kydnos et Kalykadnos," *ibid.* 206 f. "Waters of Cilicia."

H. Th. Bossert, "Zu den Bleibriefen aus Assur," *Orientalia* 20, No. 1 (1951) 70-77. Letters in hieroglyphic Hittite. Since they were rolled so that the name of the addressee was inside, they must have been accompanied by a separate address.

The new journal, *Armenian Affairs* 1, Nos. 3-4 (1950) contains (337 f.) a note on the Soviet excavations near Yerevan which have yielded some Urartian material, including "the first cuneiform tablets from the USSR."

Sedat Alp, "Bemerkungen zu den Hieroglyphen des hethitischen Monuments von Imamkulu," *AO* 18 (1950) 1-8.

William L. Moran, S. J., "The Use of the Canaanite Infinitive Absolute as a finite Verb in the Amarna Letters from Byblos," *JCS* 4, No. 3 (1950) 169-172. Cf. *AJA* 55, No. 1, 74.

Cyrus H. Gordon, "The Ugaritic 'ABC'," *Orientalia* 19, No. 3 (1950) 374-376. Typologically earlier than the Phoenician-Hebrew alphabet.

E. A. Speiser, "A Note on Alphabetic Origins," *BASOR* 121 (Feb. 1951) 17-21. Phonology and the Ugaritic alphabet.

E. Ebeling, "Mittelassyrische Rezepte zur Herstellung von wohlriechenden Salben," *Orientalia* 19, No. 3 (1950) 265-278. Continuation.

D. J. Wiseman, "The Nimrud Tablets, 1949," *Iraq* 12 (1950) 184-200. Mainly contracts 797-710 B.C.; summary and catalogue.

W. F. Albright, "Cilicia and Babylonia under the Chaldaean Kings," *BASOR* 120 (Dec. 1950) 22-25. Identification of *Khuwê* in Neo-Babylonian texts.

Francis Rue Steele, "The University Museum Esarhaddon Prism," *JAOS* 71, No. 1 (1951) 1-12. With other texts, gives 80% of the report of the restoration of the Esharra Temple at Ashur, 679 B.C.

E. Ebeling, "Eine Beschwerde einer assyrischen Handwerker Gilde über gesetzwidrige Behandlung," *Orientalia* 19, No. 4 (1950) 397-403. Sesame oil guild; late Assyrian period.

M. San Nicolò, "Der neubabylonische Lehrvertrag in rechtsvergleichender Betrachtung," *SB München* 1950, No. 3 (pp. 33).

David Diringer, "Early Hebrew Writing," *BiblArch* 13, No. 4 (Dec. 1950) 74-95. Parallel development of formal and cursive writing.

Helmuth Th. Bossert, "Schrift und Sprache der Sideten," *Belleten* 14 (1950) 1-29 (German and

Turkish). Publication of a bilingual inscription of the third century B.C. found in 1949.

G. R. Driver, "Note on a Phoenician Inscription of Ptolemaic Date," *JEA* 36 (1950) 82. On *JEA* 26, 57 ff.

G. Joh. Botterweck, "Altsüdarabische Glaser-Inschriften," *Orientalia* 19, No. 4 (1950) 435-444.

Egypt and Egyptology

Walter Federn, "Egyptian Bibliography (Concluded)," *Orientalia* 19, No. 3 (1950), 279-294. Indices.

Jean Leclant, "Compte rendu des fouilles et travaux menés en Égypte durant les campagnes 1948-1950," *Orientalia* 19, No. 3 (1950), 360-373. Especially in the Theban region. *Ibid.* No. 4 (1950) 489-501. Especially of M. Montet at Tanis.

A. J. Arkell, "Varia Sudanica," *JEA* 36 (1950) 24-40. Additions to knowledge since 1939.

Sir Alan Gardiner, "The Baptism of Pharaoh," *ibid.* 3-12. Collection of all examples shows that Pharaoh is baptized with water by the deities of the four quarters of the earth.

A. M. Blackman, H. W. Fairman, "The Significance of the Ceremony HWT BHSW in the Temple of Horus at Edfu," *ibid.* 63-81. Driving of the Calves as a harvest festival; and adaptations, mostly funerary.

S. Yeivin, "The Third District in Tuthmosis III's List of Palestino-Syrian Towns," *ibid.* 51-62.

L. Habachi, "An Inscription at Aswān Referring to Six Obelisks," *ibid.* 13-18. Under Thothmose III.

Walter Federn, "Notes on the Instruction to Kagemni and his Brethren," *ibid.* 48-50.

William C. Hayes, "The Sarcophagus of Senne-mūt," *ibid.* 19-23. Reconstruction of the fragments in the Metropolitan Museum.

F(rances) F. J(ones), "An Egyptian Goose," *Record of the Art Museum, Princeton University* 9, no. 2 (1950) 3 f. Late Egyptian trial-piece or sculptor's model, from the Brummer collection.

Rosalind Moss, "The Ancient Name of Serra (Sudan)," *JEA* 36 (1950) 41 f. Probably to be read Tehnut, on the basis of the text on a New Kingdom tomb.

M. F. Laming Macadam, "Four Meroitic Inscriptions," *ibid.* 43-47. In the Khartum museum.

GREECE AND GRECO-ROMAN ASIA

Excavations and Finds

J. M. Cook, "Archaeology in Greece, 1948-1949," *JHS* 70 (1950) 1-15.

P. Devambez, "Bulletin Archéologique," *REG* 63 (1950) 221-252.

Betty Homann-Wedeking, "A Kiln Site at Knossos," *ABSA* 45 (1950) 165-192. Description and illustration of pottery with discussion of chronology.

A. J. B. Wace, "Excavations at Mycenae, 1939," *ibid.* 193-228. Work in the prehistoric cemetery; especially description of fifteen graves dating from M.H. to L.H. II.

Ian Hamilton, "3000-year-old Cyprus Relics for Australia," *El Palacio* 58 (1951) 23 f. Objects from excavations near Myrtou of Late Bronze and Iron Age date.

Arne Furumark, "The Settlement at Ialysos and Aegean History ca. 1550-1400 B.C.," *OpusArch* 6 (1950) 150-271. Dates Trianda I as LM I A (1550-1500), Trianda II A as LM I A end-LM I B (1500-1450), and Trianda II B as LM I B end-LM II—LM III A 1, early (1450-1410). It was a Minoan settlement, and evidence of the Minoan thalassocracy. With the growth of the political power of the Mycenaean kings, their influence expanded into the Cyclades and then into Asia Minor (Miletus), and "the fall of Cretan outposts such as Trianda was followed by the destruction of Knossos itself," and Mycenaean penetration of the Near East.

J. H. Iliffe and T. B. Mitford, "Excavating the Age-old Sanctuary of Aphrodite: Important Discoveries in a Trial Dig at Old Paphos, Cyprus," *ILN* 5831 (20 Jan. 1951) 106. Finds of sixth century B.C. and earlier sculpture, and trial trench yielding layers from Late Bronze to Mediaeval date.

J. R. T. Pollard, "A New Site on Mount Lutraki," *ABSA* 45 (1950) 63-65. Fragment of sima, possibly early fifth century B.C., suggests existence of shrine.

W. A. Eden, "The Plan of Mesta, Chios," *ibid.* 16-20. Solid irregular blocks of houses, backed against city wall, and approached by series of culs-de-sac. Few main streets, connecting gates, and central square. Probably a good example of the pre-Hippodamian city plan.

J. M. Cook, R. V. Nicholls, "Laconia," *ibid.* 261-298. Excavations at Kalývia Sokhás, and Sparta.

Homer A. Thompson, "Excavations in the Athenian Agora: 1949," *Hesperia* 19 (1950) 313-337. Stoa of Attalus and Stoa Poikile.

W. H. Plommer, "Three Attic Temples," *ABSA* 45 (1950) 66-112. Hephaisteion at Athens, Temple of Poseidon at Cape Sounion, and Temple of Nemesis at Rhamnous probably all designed by one architect.

Gorham Phillips Stevens, "Some Remarks upon the Interior of the Hephaisteion," *Hesperia* 19 (1950) 143-164. Colonnades, pedestal and cult statues, ceiling, and walls with mural paintings on stucco.

Gorham Phillips Stevens, "Grilles of the Hephaisteion" *ibid.* 165-173. Very similar to those of the Parthenon.

Gorham Phillips Stevens, "A Tile Standard in the Agora of Ancient Athens," *ibid.* 174-188. Marble monument in front of the Civic Offices, representing two pan and two cover tiles of standard specifications, for guidance of magistrates and contractors.

Leicester B. Holland, "The Katastegasma of the Walls of Athens," *AJA* 54, No. 4 (1950) 337-356. Interpretation of a new fragment of *IG II²* 463. The word refers to the top-finish of the wall, not to a roof.

Sir John L. Myres, "Homeric Art," *ABSA* 45 (1950) 229-260. Works of art described in Homeric poems originate in various periods from M.M. to early Hellenic; apparently strong reliance on Minoan material culture. Literary structure of poems unrelated to Crete, and suggests Indo-European origin.

M. L. Bowen, "Some Observations on the Origin of Triglyphs," *ibid.* 113-125. Motif goes back to M.M.III, used on benches and high on walls; continued through Dark Ages in perishable materials, to reappear in stone ca. 600 B.C.

O. A. W. Dilke, "Details and Chronology of Greek Theatre Caveas," *ibid.* 21-62. Supplement to *ibid.* 43 (1948) 125-192.

Lucy T. Shoe, "Greek Mouldings of Kos and Rhodes," *Hesperia* 19 (1950) 338-369.

Reinhard Lullies, "Hermenfragen," *WJA* 4 (1949/50) 126-139. The origin of the herm, and the development of the portrait herm, in support of his 1931 opinion.

Rhys Carpenter, "Tradition and Invention in Attic Reliefs," *AJA* 54, No. 4 (1950) 323-336. Artists of the Periclean period were influenced by the Archaic reliefs, and contemporary sculpture.

Gisela M. A. Richter, "Greek Fifth-Century Silverware and Later Imitations," *ibid.* 357-370. Acquisition of the mate of a late fifth-century bowl by the Metropolitan Museum leads to the identification of a pair in the British Museum as of the same date, and to the identification of two other bowls as Hellenistic reproductions of the same types.

Margarete Bieber, "A Bronze Statuette of a Comic Actor," *Record of the Art Museum, Princeton University* 9, no. 2 (1950) 5-12. Alexandrian bronze of masked actor, about second century B.C.; probably represents fugitive slave.

Dorothy Burr Thompson, "A Bronze Dancer from Alexandria," *AJA* 54, No. 4 (1950) 371-385. A figurine in a private collection of a veiled dancer of the end of the third or the beginning of the second century is Alexandrine in dress and supposed origin.

Oscar Broneer, "Terracotta Altars from Corinth," *Hesperia* 19 (1950) 370-375. Three new examples.

"In Striking Contrast with the Metaponto Crested Helm: A Noble Corinthian Example of the Sixth Century B.C.," *ILN* 5834 (10 Feb. 1951) 201 and

color plate II. Bronze helmet with simple engraved decoration of bulls and palmette from the Boston Museum of Fine Arts, contrasted with the Metaponto crested helmet from St. Louis.

Sylvia Benton, "The Dating of Horses on Stands and Spectacle Fibulae," *JHS* 70 (1950) 16-22. In the Archaic Period.

L. Byvanck-Quarles van Ufford, "La chronologie de l'art grec de 475-425 av. J. Chr.," *Mnemosyne*, 4th Ser., 3, No. 4 (1950) 288-301. Distinguishes four periods: 475-460, the "Old Masters"; 460-450, archaizing; 450-430, classical; after 430, exaggeration and elaboration.

T. J. Dunbabin, "An Attic Bowl," *ABSA* 45 (1950) 193-202. Painted in Corinthian style by painter in workshop of Sphinx Painter.

Edna M. Hooker, "The Sanctuary and Altar of Chryse in Attic Red-Figure Vase-Paintings of the Late Fifth and Early Fourth Centuries B.C.," *JHS* 70 (1950) 35-41. Two certain and five supposed instances.

C. Fontinoy, "Le sacrifice nuptial de Polyxène," *AntCl* 19 (1950) 383-396. Includes reference to the vase illustrations.

Martin Robertson, "Origins of the Berlin Painter," *JHS* 70 (1950) 23-34. Study of a volute crater at Cambridge.

A. D. Ure, "Boeotian Haloa," *JHS* 69 (1949) 18-24. Three new vases of Reading University belong to Wide's Mycalessos group of about 430, and are connected with the festival of Demeter and Dionysus at the threshing floor.

Aşkidil Akarca, "Un vase 'Kertch' de Varsak au Musée d'Antalya," *Belleten* 14 (1950) 31-36. Amazonomachy (two mounted Amazons attacking a griffon) on one side, three figures on the other.

D. P. Mantzouranis, "The Annual Agricultural Revenue of Lesbos in Antiquity" (in Greek). Pp. 15. Mytilene, 1950. Attempt to estimate the employment of the total surface of the island in the fifth century B.C. Income of 2,550,000 Attic drachmae, principally from cereals, animals, and oil.

James L. Kelso, "The First Campaign of Excavation in New Testament Jericho," *BASOR* 120 (Dec. 1950) 11-22. Remains of Herodian and early Roman buildings.

James L. Kelso, "Excavations at Khirbet en-Nitla near Jerico," *BASOR* 121 (Feb. 1951) 6-8. Four churches on the same site, the third (dated to the eighth century) with a mosaic with two interesting inscriptions. (The author suggests that the writing may be Greek, but the Latin "R" and "L" are unmistakable. Each begins with a *nomen sanctum* surmounted by an abbreviation sign, and continues with a prayer. The first is to be read *meserere* for *miserere*; the second is more difficult, though the first letters,

SEPILE, are clear, perhaps SEPILETO-SEPE-LITO.)

M. Avi-Yonah, "Oriental Elements in the Art of Palestine in the Roman and Byzantine Periods," *QDAP* 14 (1950) 49-80. Concluded from *ibid.* 13, 128-165.

G. Lankester Harding, "A Roman Family Vault on Jebel Jofeh, 'Amman," *ibid.* 81-94. Large amounts of pottery and jewelry.

R. W. Hamilton, "A Mosaic Carpet of Umayyad Date at Khirbat al Mafjar," *ibid.* 120. Colored illustration shows tree with fruit, beneath which three gazelles, one of which is attacked by a lion.

J. H. Iliffe, "Note on Objects of Pseudo-Jet and a Gnostic Gem from Roman Tomb at 'Amman," *ibid.* 95 f.

Greek Epigraphy

Jeanne Robert, Louis Robert, "Bulletin Épigraphique," *REG* 63 (1950) 121-220.

Marcus N. Tod, "Bibliography: Graeco-Roman Egypt, Greek Inscriptions (1948-9)," *JEA* 36 (1950) 106-109.

Bedřich Hrozný, "Une nouvelle inscription crétoise de Pylos (Blegen No. 40). Essai de Déchiffrement," *JJurPap* 4 (1950) 43-47. List of receipts from sanctuaries.

Marcus N. Tod, "The Alphabetic Numeral System in Attica," *ABSA* 45 (1950) 126-139. Standard later Greek system based on 27-letter alphabet used in Attica as early as fifth century B.C.

Chr. Pélékidis, "Notes d'épigraphie attique," *REG* 63 (1950) 107-120. Texts mentioning the Panathenaic Stadium.

L. H. Jeffery, "Comments on some Archaic Greek Inscriptions," *JHS* 69 (1949) 25-38. Includes two new archaic and two later funerary texts from Crete.

George A. Stamires, Eugene Vanderpool, "Kallixenos the Alkmeonid," *Hesperia* 19 (1950) 376-390. Named on 251 ostraca, he appears as an important figure of the Persian Wars, 483 and 482 B.C.

Martin Ostwald, "The Prytaneion Decree Re-examined," *AJP* 72 (1951) 24-46. Restudy of *IG* I² 77, to restore mention of *manteis* rather than of *exegetai* in line 9.

B. B. Shefton, "The Dedication of Callimachus (*IG* I² 609)," *ABSA* 45 (1950) 140-164. Column used as statue base. Restoration of epigram with suggestion that it was a secondary addition to original dedication.

Markellos Th. Mitsos, Eugene Vanderpool, "Inscriptions from Attica: Addendum," *Hesperia* 19 (1950) 391. The dedication of *ibid.* pp. 25 f. may have been the Historian Xenophon.

Margaret Crosby, "The Leases of the Laureion Mines," *ibid.* 189-312. Publication with introduction,

commentary, and full indices of 38 inscriptions from 367/6 to 307/6 recording the "sale" of mines by the poletai. It is not clear what the "prices" mean, whether payments to be made once, or each year, or each prytany, though it appears that benefits accrued to the contractor who took over a working which was out of use, but the texts are of great importance for the economic history of Athens in the fourth century.

J. D. Beazley, "Some Inscriptions on Vases: V," *AJA* 54, No. 4 (1950) 310-322. Various texts, mostly names, on 24 vases of classical period.

T. B. Mitford, "Kafizin and the Cypriot Syllabary," *CQ* 44, Nos. 3-4 (1950) 97-106. Excavations disclosed sanctuary of the Nymph and source of sherds of Onesagoras, tithe collector 225-217 B.C. Latest known use of syllabary.

Charles Edson, "The Location of Cellae and the Route of the Via Egnatia in Western Macedonia," *CP* 46 (1951) 1-16. Inscriptions show that the road followed the present railway line. Some royal Macedonian road markers exist.

T. B. Mitford, "New Inscriptions from Roman Cyprus," *OpusArch* 6 (1950) 1-95. Fifty texts, new or almost new, of various sorts: dedications, statue bases, milestones, tombstones, legal documents. (A few comments may be made on an interesting collection of texts. The author refrains from attempting to date the texts on the basis of script, but the script apparently follows the usual development of the Orient, and may be roughly dated. The author restores liberally, but I doubt some of his interpretations. No. 5 should be a mortgage rather than a will: it will last μέχρι της αποδόσεως τοῦ ἀργυρίου, or something of the sort. The word καταγραφή is curious in No. 6, or can it be justified in the sense of "sale" (deed of sale) as in Dura Parchment 23? No. 7 is hardly to be taken as a will on the basis of the possible restoration: κατά διαθήκην, in line 14; if διαθήκην is correctly restored, it would not refer to the existing text, which is more likely to be a land transfer of some sort. No. 36 is restored as too short on the left, since the heading must have been centered. In No. 25, Φηρία is surely the name of the dog, making this the epitaph of a hunting bitch. In No. 47, can not λόχε be aphaeresis for ἀλόχε, especially since it is preceded by an A in line 2? It is easier to suppose an epitaph of two married daughters of Tyche, than that both died in childbirth (assuming that philologically λόχε may be derived from λεχώ). It is interesting that they are *matris certae patris incerti*. Tyche was probably a slave. The restoration of the name Φήλιξ in the last line is highly conjectural.—The collection as a whole is most useful, but seems to follow no recognizable order, topographical, chronological, topical.)

Josef Keil, "Ein Orakel des klarischen Apollon," *Anz. Ak. Wien* 1945, VI-XI. Inscription on anta

block in Ephesos; question and answer concerning erection of altars, one to Eros. Probably from oracle of Apollo at Clarus.

Josef Keil, "Eine Biologeninschrift aus Ephesos," *ibid.* I-V. Next text in honor of Athenian mime, with five women and seven men of his troop. See J. and L. Robert, "Bulletin Épigraphique," *REG* 59-60 (1946-47) 51.

Josef Keil, "Die Inschriften der Agora von Smyrna," *Istanbuler Forschungen* 17 (1950) 54-68. Thirty-six texts from the Austrian excavations, partly unpublished, mostly honorific and from Roman times.

Josef Keil, "Zeus Trosu," *Anz. Ak. Wien* 1950, No. 7, 83-86. Evidence for this epithet from vicinity of Dionysopolis in Phrygia.

G. E. Bean, "Two Epigraphical Notes from Pamphylia," *JHS* 69 (1949) 73-75. Improved readings of Van Buren, *JHS* 28 (1908) 190 based on autopsy.

M. Schwabe, "A New Greek Epitaph from Palestine," *JJurPap* 4 (1950) 309-315. Dates to first century of Empire. (I doubt so early a date.)

Maurice Dunand, "Nouvelles inscriptions du Djebel Druze et du Hauran," *AO* 18 (1950) 144-164. Sixty-four texts, mostly funerary and Christian.

Greco-Roman Papyrology

Eric G. Turner, "Two Greek Epigrams," *JJurPap* 4 (1950) 235-238. From an unpublished papyrus in the Flinders Petrie find at Hawara, of the third century B.C.

C. H. Roberts, "A Hellenistic Epigram Recovered," *ibid.* 215-217. *P. Rendel Harris* 56; on Apelles.

Wilhelm Schubart, "Ein Platon-Papyrus," *ibid.* 83-87. *Apology* 40 B-41 C, about A.D. 100.

Marcello Gigante, "Una fonte antiromana sulle trattative romano-cartaginesi del 203 a.C.," *Aegyptus* 30 (1950) 77-92. A new study of *P. Rylands* III 491.

Jean Scherer, "Une leçon méconnue de 2 Cor. 12, 19, et son interprétation marcionite," *JJurPap* 4 (1950) 229-233. Quoting a passage from the Tura commentary of Origin on the Epistle to the Romans.

Roger Remondon, "A propos d'un papyrus de l'Enéide, I 256-261; 270-274; 702-707; 711-719, avec traduction grecque," *ibid.* 239-251. Interesting parallel to the text from Auja Hafir (Nessana) in a Cairo papyrus of the fourth century.

Raphael Taubenschlag, "Survey of the Papyri Published chiefly from 1949-1950," *ibid.* 375-388.

"Aggiunte, Correzioni, Riedizioni di Papyri e di Ostraca"; "Testi recentemente Pubblicati," *Aegyptus* 30 (1950) 93-100.

Rosamaria Rossi, "Psiloi Topoi," *ibid.* 42-56. Collection and examination of all the instances of this term for "vacant lot" in the papyri.

T. Reekmans, E. Van 't Dack, "A 2nd Century B.C. Petition," *Rev. Intern. des Droits de l'Antiquité* 5

(1950) 417-427. Appeal to the strategos of the Thebaid to compel the seller of land to *katagrapasai*. Papyrus text of legal interest.

O. Guéraud, "Un vase ayant contenu un échantillon de blé," *JJurPap* 4 (1950) 107-115. Vase found at Oxyrhynchus, with dipinto on outside, dated 2 B.C. Used for conveying sealed sample of grain with shipment to Alexandria, signed by the ship-captains. The super-cargoes were legionaries.

T. Schwartz, "Un formulaire de nomographie," *ibid.* 209-214. Formulas for oath of surety, and for lease of oil-garden. (The author accents *τινος*, *τινι*, etc. as indefinites, but they are better taken as interrogatives: "Who, son of whom, to whom, of what place?" and so on.)

Erwin Seidl, "Studien zu Pap. Ibscher Inv. Nr. 7," *ibid.* 159-164. Recognized and restored as extract from the law of Alexandria dealing with sureties.

Victor Martin, "Une *Graphê Andron* du premier siècle," *ibid.* 143-149. Geneva papyrus of A.D. 50/51, with bearing on the estates of the Imperial family.

André Bataille, "Un papyrus Clérmont-Ganneau appartenant à l'Académie des Inscriptions," *ibid.* 327-339. *Epikrisis* of a veteran (late second century) and private letter (third century).

Zaki Aly, "Sitologia in Roman Egypt," *ibid.* 289-307. Commentary on *P. Fuad* 233, new return of *sitologoi*, A.D. 229.

Arthur E. R. Boak, "Two Contracts from Karanis," *ibid.* 101-106. Two sales from Karanis, A.D. 267 and 309.

V. Tchirikover has circulated a description of the project which he reported to the Paris Papyrological Congress for a *Corpus Papyrorum Judaicarum* to contain a new edition of all papyri dealing with Jews or Jewish affairs. He appeals to all custodians of collections of papyri for information of relevant unpublished texts.

Jean Simon, "Bibliographie copte. 2" *Orientalia* 19, No. 3 (1950), 295-327.

The Dead Sea Scrolls

O. R. Sellers, "Date of Cloth from the 'Ain Fashkha Cave," *BiblArch* 14, No. 1 (1951) 29. Carbon 14 process dates to 167 B.C.—A.D. 233.

Floyd V. Filson, "Some Recent Study of the Dead Sea Scrolls"; "New Fragments of the Dead Sea Scrolls," *BiblArch* 13, No. 4 (Dec. 1950) 96-100.

R. de Vaux, "A propos des manuscrits de la Mer Morte," *RBibl* 57 (1950) 417-429. Cites letter of Patriarch Timothy I (about A.D. 800) relating alleged discovery of Biblical manuscripts in a Palestinian cave, with possible connection with 1947 discovery.

D. Barthélemy, "Le grand rouleau d'Isaïe trouvé près de la Mer Morte," *ibid.* 530-549. Review of *The Dead Sea Scrolls of St. Mark's Monastery*.

John C. Trever, "Isaiah 43:19 According to the First Isaiah Scroll (DS1a)," *BASOR* 121 (Feb. 1951) 13-16.

Wm. H. Brownlee, "Excerpts from the Translation of the Dead Sea Manual of Discipline," *ibid.* 8-13.

ITALY AND NORTH AFRICA

Excavations and Finds

T. J. Dunbabin, "Contributions to the Bibliography of the Greek Cities in Sicily and South Italy," *PBSR* 18 (1950) 104-116.

The Accademia Nazionale dei Lincei has published two additional numbers of its *Notizie degli Scavi di Antichità* (Vol. II, Fasc. 1-6, 1949, and Fasc. 7-12, 1950; together, with indices, pp. 341).

Hermann Egger, "Quadriporticus Sancti Petri in Vaticano," *PBSR* 18 (1950) 101-103. Probably part of original plan, but never constructed.

Leslie Alcock, "A Seaside Villa in Tripolitania," *ibid.* 92-100. Building remains and mosaics, provisionally assigned to second and third centuries.

A. R. A. Van Aken, "The Cortile in the Roman Imperial Insula-Architecture," *OpusArch* 6 (1950) 112-128. Not influenced by the Italic atrium nor by the Hellenistic garden-peristyle, but indirectly by the Greek court-peristyle.

René Charlier, "La Numidie vue par Salluste. Circa Regia: Constantine ou Le Kef," *AntCl* 19 (1950) 289-307. The latter site fits better than Constantine, generally accepted since Gsell.

Dietrich von Bothmer, "Enkaustes Agalmaton," *BMMA* Feb. 1951, 156-161. South Italian krater with scene of encaustic painter at work on a statue of Herakles.

Giuseppe Bovini, "La pittura etrusca del período orientalizante," *Ampurias* 11 (1949) 63-90. Suggested new sequence of the tombs from 625-575 B.C.

J. D. Beazley, "The World of the Etruscan Mirror," *JHS* 69 (1949) 1-17. Preliminary classification, fifth to third centuries.

János György Szilágyi, "Due vasi dalla fabbrica del Pittore di Micali," *Antiquitas Hungarica* 3 (1949) 38-48 (in Hungarian; summary in Italian). Two Etruscan vases of the late sixth century B.C.

Writing in four issues of the *Giornale d'Italia* (21-24 June 1950), Professor Matteo Della Corte examines the famous silver treasure of Boscoreale, decides that it belongs to the early Imperial times, and like the smaller treasure of the Villa of the Mysteries, came from the Imperial estates scattered under the Flavians. This hypothesis, recommended by the quality of the work and the value of the silver, gives point to some identifications, among them the scene of Augustus glorified by Tiberius, and the recognition, in the famous female bust with the elephant scalp, of

a portrait of Cleopatra VII. As this beautiful patera was scarcely made for Augustus, we may see in it part of the spoils of Alexandria, and a genuine piece of Alexandrine toreutic of the late Hellenistic times.

A. Alföldi, "Die Geburt der kaiserlichen Bildsymbolik," *MusHelv* 7 (1950) 1-13. Representation of Rea Silvia in the late Republic as symbol of the rule of the Romulids.

Latin Epigraphy

Emil Vetter, "Zu den venetischen Inschriften Kärntens," *Carinthia I* 140 (1950) 130-140.

Giuviana Meneghetti, "Probabile natura e sopravvivenza delle divinità celtiche 'Adganae,'" *Aethnaeum* 28 (1950) 116-127. Celtic woodland deities in a Lombard inscription.

Johannes Stroux, for the Deutsche Akademie der Wissenschaften zu Berlin, announces the forthcoming Part III of the Supplement to Volume IV of the *Corpus Inscriptionum Latinarum*, under the editorship of Matteo Della Corte, with 3,000 new inscriptions from Pompeii. The editor discusses the project in a paper in *Pompeiana, Raccolta di Studi per il Secondo Centenario degli Scavi di Pompei* (Naples, 1950) 1-11. Perhaps the most notable discovery is the apparent proof of Christians in the city, through two examples of the *rotas-opera* rebus. Cf. also the papers of the editor in the *Rendiconti* of the Naples Academy, "Volumen Epigraphicum Pompeianum" (23, 1949) and "Graffiti Pompeiani indotti da Soggetti dipinti o scolpiti in vista" (24/25, 1950).

R. G. Goodchild, "Two Monumental Inscriptions of Lepcis Magna," *PBSR* 18 (1950) 72-82. Augustan dedication of market, and Flavian inscription, probably from monumental arch, the blocks of which were found in Byzantine gate.

R. G. Goodchild, "The Latino-Libyan Inscriptions of Tripolitania," *AntJ* 30 (1950) 135-144. In Latin letters, perhaps transliteration of local dialect. Look later than Severan period.

R. G. Goodchild, "Roman Milestones in Cyrenaica," *PBSR* 18 (1950) 83-91. Roads integrated into Roman military system, with milestones beginning with Claudius.

Ferenc Fülep, "Une stèle inconnue à Seregélyes," *Antiquitas Hungarica* 3 (1949) 77-82 (in Hungarian; summary in French). Epitaph of Celtic woman with scene of sacrifice, about A.D. 100.

Hermann Vetter, "Vibes," *Carinthia I* 140 (1950) 140-145. Deities of a healing spring, in an inscription from Villach.

Rudolf Egger, "Römische Grabsteine aus dem Lavanttal," *ibid.* 247 f. Two new epitaphs.

Konrad Kraft, "Die Tafel von Brigetio und das Aufhören der Militärdiplome," *Germania* 28 (1944-1950) 242-250. Table of privileges of A.D. 311, and

discussion of changes in Roman military privileges.

Joaquín M. de Navascués y de Juan, "Le fecha del epígrafe emeritense de la mártir Eulalia," *Ampurias* 11 (1949) 151-172. Dates to about A.D. 661/2.

EUROPE

General Surveys

Carl A. Roebuck, "Archaeological News: European Lands," *AJA* 54, No. 4 (1950) 394-424. Reports by various hands on Spain and Portugal, France, Austria, Rumania, and Poland, covering the year 1948-49.

Henry Field and Kathleen Price, "Archaeological News, Russia," *ibid.* 425-429. From the 1948 *Vestnik* of the Russian Academy of Sciences.

"Chronique archéologique française," *La Nouvelle Clio* 1/2, Nos. 5/6 (May-June 1950) 283-293.

"Chroniques-Archéologie," *AntCl* 19 (1950) 407-426. Notes on archaeology of the Low Countries by various hands.

A. E. Van Giffen, W. Glasbergen, "De Opgravingen in Nederland in 1949," *ibid.* 427-436.

José Sánchez Real, "Noticiario," *Boletín Arqueológico* (Tarragona) 4, Fasc. 31 (1950) 202-212. Greek and Roman sculpture; Latin inscriptions.

"Varia," *Ampurias* 11 (1949) 175-214. Archaeological notes and discoveries in Spain.

Palaeolithic and Mesolithic Periods

Maria Mottl, "Das Liegloch im Ennstal, eine Jagdstation des Eiszeitmenschen," *Archaeologia Austriaca* 5 (1950) 18-23. Stratification of cave. Finds of Aurignacian hunters, chiefly of Würm I.

Maria Mottl, "Die paläolithischen Funde aus der Salzofenhöhle im Toten Gebirge," *ibid.* 24-34. Summary of finds.

Fritz Brandtner and Franz Zabusch, "Neuere Paläolithfunde aus der Umgebung von Eggenburg, N.Ö.," *ibid.* 89-96. Mousterian and Magdalenian finds in cave, Aurignacian in open station.

Fritz Brandtner, "Über die relative Chronologie des jüngeren Pleistozäns Niederösterreichs," *ibid.* 101-113. Mousterian Würm I and perhaps earlier, Aurignacian beginning in Würm I-II interglacial period, and extending into Würm III (with Solutrean as local facies during Würm II), Magdalenian beginning in Würm III.

Maria Mottl, "Das Protoaurignacien der Repolusthöhle bei Peggau, Steiermark," *ibid.* 6-17. In Riss-Würm interglacial period; description of industry and its relation to other European Upper Palaeolithic industries.

Franz Hampl, "Das Aurignacien aus Senftenberg im Kremstal, N. Ö.," *ibid.* 80-88. Flints of middle and late Aurignacian.

Emil Weinfurter, "Zwei neue Aurignacien-Fund-

stellen aus Niederösterreich," *ibid.* 97-100. Flint implements.

Fritz Felgenhauer, "Miesslingtal bei Spitz a.d. Donau, N. Ö., ein Fundplatz des oberen Paläolithikums," *ibid.* 35-62. Catalogue of finds and discussion of stratigraphy; late Aurignacian with Magdalenian-like elements, probably Würm II.

Josef Szombathy, "Der menschliche Unterkiefer aus dem Miesslingtal bei Spitz, N. Ö.," *ibid.* 1-5. Closely connected with skeletal remains of Late Palaeolithic date already known from this region.

Karl Kromer, "J. Bayers 'Willendorf II'-Grabung im Jahre 1913," *ibid.* 63-79. Discussion of stratigraphy; lists of finds and their affinities, with main levels identified as Gravettian.

Franz Eppel, "Die Herkunft der Venus I von Willendorf," *ibid.* 114-145. Detailed stylistic analysis of statuette, and association on this and other grounds with the flint industry of Krems rather than that of Willendorf; connections with Middle Aurignacian of Western Europe.

Grahame Clark, "The Hunter-Fishers of Mesolithic Yorkshire: further Remarkable Discoveries from the Ten-Thousand-Year-Old Star Carr Site," *ILN* 5833 (3 Feb. 1951) 170-173. Implements and animal bones (none domestic, except the dog), and platforms of birch brush dated by radio-carbon tests within range 7888-7188 B.C.

Joan R. Harding, "Prehistoric Sites on the North Cornish Coast between Newquay and Perranporth," *AntJ* 30 (1950) 156-169. Mesolithic to Iron Age remains found by survey and trenching.

L. Bernabó Brea, "La cueva Corruggi en el territorio de Pachino," *Ampurias* 11 (1949) 1-23. Flints of various periods.

Juan Serra Vilaró, "Insculturas Dolménicas," *Boletín Arqueológico* (Tarragona) 4, Fasc. 31 (1950) 114-122. Megaliths with carvings.

H. Durand-Tullou, "Recherches concernant les mégalithes du Causse de Blandas (Gard)," *RSL* 16 (1950) 86-106. Catalogue of known specimens.

Jean Arnal, "Los dólmenes de corredor con muros de piedra seca en el Hérault (Francia)," *Ampurias* 11 (1949) 33-45.

Volume 2, Fasc. 1/2, of the *Nouvelles Archéologiques* (1950), edited by Jan Filip for the Institut National d'Archéologie at Prague (Czech, with summaries in Russian and French) contains the following notes and articles concerning the archaeology of Czechoslovakia: B. Klíma, "Sépulture de femme des chasseurs de mammoths à Dolní Věstonice en Moravie" (32-36); B. Dubský, "Atelier à industrie quartzite découvert au campement épipaléolithique de Ražice en Bohême méridionale" (36-40); F. Prošek, "Sépultures mésolithiques à Obříství?" (40-44); "Etude anthropologique de E. Vlček" (44-49); J. Pavelčík, "Station néo-

lithique fortifiée près d'Uherský Brod en Moravie" (49-51); J. Neustupný, "Station néolithique fortifiée à Hluboké Mašůvky en Moravie" (52-56); A. Knor, "Habitat de la civilisation dite de Mad'arovce à Veselé près de Piešťany en Slovaquie" (56-60); K. Tihelka, "Sépultures de groupe de Velatice trouvées sur la colline dite Cezavy près de Blučina en Moravie" (61-63); V. Spurný, "Quelques nouvelles trouvailles en Bohême" (98-101; Hallstatt and La Tène); B. Svoboda, "Nouvel oppidum celtique en Bohême méridionale" (64-68); L. Kraskovská, "Découverte d'objets romains à Zohor en Slovaquie" (68-70); V. Budinský-Křička, "Nécropole slave-ancienne à tumuli à Kralovský Chlmec en Slovaquie orientale (70-74); V. Hrubý, "Fouilles du cimetière slave de Staré Město, Moravie" (3-12); J. Pouřk, "Découverte d'une deuxième église à Staré Město, Moravie" (12-22); id., "Résultats des fouilles du cimetière slave de Dolní Věstonice" (22-31); J. Kabát, "Trouvailles slaves de la région de Píbram" (75-76); J. Kudrnáč, "Silo slave de Klučov en Bohême" (76-79); J. Böhm, "Recherches au bourgwall de Libušin, Bohême" (79-87); M. Šolle, "Le bourgwall de Kouřim à la fin de la campagne de 1949" (87-93); R. Turek, "Nouvelles recherches au bourgwall de Libice" (93-98). One paper concerns Poland: Z. Podkowińska, "Hameau néolithique situé sur la colline de Gawroniec près de Ćmielow en Pologne" (102-106).

Fasc. 3/4 contains the following: V. Budinský-Křička, "Trouvailles préhistoriques et protohistoriques de Levice en Slovaquie" (153-158; includes some tombs of Roman and Migration date); A. Točík-J. Drenko, "Recherches à Prša en Slovaquie" (159-174; principally material from the Migrations); F. Prošek, "Fouilles de la station paléolithique de Moravany, Slovaquie" (175-183); L. Kraskovská, "Sépultures de la Tène trouvées à Komjatice en Slovaquie" (184-186); id., "Nouvelles trouvailles de la période slave-ancienne à Bešeňov en Slovaquie" (186-188); I. Borkovský, "Découverte d'une nouvelle église au château de Prague" (188-199; destroyed in the eleventh century); J. Filip, "Exercices pratiques d'archéologie et fouilles d'habitat préhistorique à Královce, arrt. de Slaný en Bohême" (199-208); B. Soudský, M. Buchvaldek, "Fouilles d'habitat du peuple à céramique spiralée à Postoloprty en Bohême" (208-212); H. Pokorná, "Vase énéolithique trouvé à Postoloprty, Bohême" (212-214); M. Šolle, "Sépulture ouniétitzienne et habitat hallstattien à Rybníky près Moravský Krumlov" (214-217); J. Říhový, "Dépôt de bronzes à Klentnice près Mikulov en Moravie" (217-221); J. Kudrnáč, "Champ d'urnes près de Zvírotice, arrt. de Sedlčany, Bohême (221-224); J. Tomský, "Trouvaille de bronzes de Bohdašín, arrt. de Dobruška en Bohême" (224-226); J. Kabát, "Objets de la période

de la Tène trouvés à Sv. Jan pod Skalou en Bohême" (226-228); J. Kudrnáč, "Cimetière à squelettes de l'époque des grandes invasions de Kolín en Bohême" (228-231); B. Novotný, "Découverte d'une pirogue dans l'Elbe près de Poděbrady" (231-234); J. Filip, "Les faciès du paléolithique supérieur en Tchécoslovaquie et la question de sa classification" (239-241).

Neolithic, Bronze, and Iron Ages

Max Escalon de Fonton, "Fouilles dans la Baume-Sourne," *RSLig* 16 (1950) 73-85. Vicinity of Marseilles. Early Neolithic and Eneolithic levels.

Luigi Bernabò Brea, "Il neolitico a ceramica impressa e la sua diffusione nel Mediterraneo," *ibid.* 25-36. Spread from the Near East to Spain, yielded to the Tell Halaf culture in the East in the fifth/fourth millennium, lasted longer in the West.

Franz X. Kohla, "Über die spätneolithische Station 'Steinkögelen,'" *Carinthia I* 140 (1950) 82-86.

Amalia Mozsolics, "Gold finds in Tsofalva," *Antiquitas Hungarica* 3 (1949) 14-29 (in Hungarian; summary in Russian). Axes and horse-trappings, 1200-1100 B.C.

J. F. S. Stone, "An Axe-Hammer from Fifield Bavant, Wilts., and the Exploitation of Preselite," *AntJ* 30 (1950) 145-151. Implements and monuments of local type of dolerite, possibly of factory as early as Neolithic times.

H. Martin, J. Taffanel, J. Arnal, "La cueva de la Treille (Mailhac, Aude)," *Ampurias* 11 (1949) 25-31. Pottery and other objects from the Bronze to the La Tène periods.

Hermann Müller-Karpe, "Zur Urgeschichte des Gailtales," *Carinthia I* 140 (1950) 125-130. Urn-fields to Celts.

O. Davies, "Excavations at the Horned Cairn of Ballymarlagh, Co. Antrim," *Ulster Journal of Archaeology* 12 (1949) 26-42. Cairn with forecourt and several chambers, yielding cremation burial and Neolithic and Bronze Age artifacts.

J. M. Mogey, "Preliminary Report on Excavations in Mullaghmore td., Co. Down," *ibid.* 82-88. Monument with rampart and fosse, with similarities to English "henge" monuments. Cremation layer in center associated with pottery which may be Late Bronze to Early Iron in date.

Among the "Varia" in the *RSLig* 16 (1950) are a number of excavation/exploration reports: "La grotte de la Rouquette," J. Salles, M. Brousse, M. Louis (107-117), Copper Age civilization of the "Plateaux People"; "La station du 'Roc de Conilhac,'" Max Guy (118-125), three excavations yielding Bronze Age and Hallstatt remains; "Récemment découvertes d'anses à bouton," J. Arnal (126-128), "Polada" pottery of the terramare; "La statue-menhir de Saint-Léonce," Louis Balsan (129-132); "La grotte des

Cloches," A. and P. Huchard, M. Louis (133-139), from Neolithic (possibly) to Gallo-Roman Periods; "La necropole de La Pave," Georges Claustres (140-150), urn-burials of the sixth century B.C., with Anatolian connections; "La necropole I du 'Grand-Bassin' à Mailhac," O. and J. Taffanel (151-156), forty tombs with incineration burials of about 600 B.C.

Hugh Hencken, "Herzprung Shields and Greek Trade," *AJA* 54, No. 4 (1950) 295-309. The "U" type belongs to the Adriatic-Denmark-North Ireland route, where it meets the "V" type, proceeding via Spain and the Atlantic. Their arrival marks the end of the European Bronze Age, in the 8th/7th century.

Werner Jorns, "Neue Beiträge zur Hügelgräber-bronzezeit Starkenburgs," *Germania* 28 (1944-1950) 176-187. Eighteen graves with jewelry.

Ilse Schwidetzky, "Zur Anthropologie der jüngeren Hügelgräberbronzezeit Starkenburgs," *ibid.* 187-196. Mixture of races, chiefly Nordic and Dinaric, but probably also Mediterranean.

J. Jannoray, "Les fouilles d'Ensérune (Hérault) et la connaissance des civilisations préromaines de la Gaule méridionale," *La Nouvelle Clío* 1/2, Nos. 5/6 (May-June 1950) 208-230. Three periods of occupation, from the sixth to the first centuries B.C. Evidence of active trade and Mediterranean contacts.

Nino Lamboglia, "Questioni etnico-linguistiche sulla Valle del Rodano," *RSLig* 16 (1950) 57-72. No general Gallic conquest in the Rhone valley, allowing the Ligurian civilization to survive.

Martin Almagro, "Ligures en España. II. Las hipótesis de los filólogos," *ibid.* 37-56. Review of the scholarly opinion.

Richard Pittioni, "Zum Hallstatt-A-Horizont in Kärnten," *Carinthia I* 140 (1950) 87-90.

S.-J. De Laet, M. E. Mariën, "La nécropole de Lommel-Kattenbosch," *AntCl* 19 (1950) 309-366. From Hallstatt C to late La Tène. Extensive pottery fields.

Emil Krüger, "Lesefrüchte aus Gallien," *Germania* 28 (1944-1950) 213-224. Greco-Roman and Gallo-Celtic elements in the representations of the Dioscuri from region of Solutrè; ancient Gallic menhir still venerated in Christian times.

Emil Krüger, "Die Deutung der Pforzheimer Statuette als Göttin Sirona," *ibid.* 235-241. Nymph goddess of springs, associated with Grannus.

Werner Krämer, "Der keltische Bronzestier von Weltenburg in Niederbayern," *ibid.* 210-213. One of a class of La Tène bronzes characterized by stylized slenderness of body.

Walter Modrijan, "Die figurale Bleiplastik von Frög," *Carinthia I* 140 (1950) 91-120. From a cemetery of 700-400 B.C., with Italian connections (Este II-III; Bologna/Arnoaldi-Bologna/Certosa).

"Superb Torcs Turned up by the Plough in England: Magnificent Examples of 1st Century B.C. Celtic Goldsmiths' Work," *ILN* 5838 (10 March 1951) color plate IV. Color photographs of the fine torcs discovered at Snettisham; cf. *AJA* 55 (1951) 251.

Martin Hell, "Ein litzenkeramisches Gefäßbruchstück aus Salzburg," *Germania* 28 (1944-1950) 173-175. Early Bronze Age fragment with cord-impressed decoration.

Hans Jürgen Hundt, "Die Bronzedosen der älteren Bronzezeit Mecklenburgs," *ibid.* 197-209. Shallow boxes with ornamented covers, and other bronzes; distribution of types.

The Roman Period

"Noticiario," *Boletín Arqueológico* (Tarragona) 4 (1950) 92. Two Latin epitaphs, and a bronze figurine.

Luis R. Amorós, "Excavaciones en Pollentia," *Boletín de la Sociedad Arqueológica Luliana* (Palma de Mallorca) 30 (1949) 434-442. Architectural remains, pottery, and marble female head of Roman times.

Paul Leber, "Neue archäologische Funde in Kärnten," *Carinthia I* 140 (1950) 235-247. Sculpture and inscriptions of the Roman period.

Walter Görlich, "Römerfunde in der Kirche von Gratschach bei Villach," *ibid.* 249-256. Architectural decoration.

Rudolf Egger, "Die Ausgrabungen auf dem Magdalensberg," *ibid.* 433-510. Various finds of the Roman period.

Viktor Paschinger, "Der Magdalensberg. Eine geographische Betrachtung," *ibid.* 389-395.

S.-J. De Laet, "Un sanctuaire gallo-romain à Hofstade-lez-Alost (Flandre Orientale)," *La Nouvelle Clío* 1/2, Nos. 5/6 (May-June 1950) 231-237. Recently discovered temple of second century, which had replaced one built in the first century of the Empire.

László Barkóczi, "Nouvelles données pour la topographie de Brigetio," *Antiquitas Hungarica* 3 (1949) 67-77 (in Hungarian; summary in French).

Hedwig Kenner, "Antike römische Wandmalerei in Kärnten," *Carinthia I* 140 (1950) 150-171. Virunum and Magdalensberg.

Camillo Praschniker, "Der Meister von Virunum; ein Bildhauer der Römerzeit in Kärnten," *ibid.* 3-23. Based on a number of male and female statues in the Klagenfurt museum.

Gizella Erdélyi, "La représentation de Médée sur un monument romain de Székesfehérvár," *Antiquitas Hungarica* 3 (1949) 82-85 (in Hungarian; summary in French). Second or third century.

Nino Lamboglia, "Le estratigrafia de Albintimilium y la cronología de la cerámica romana," *Ampurias* 11 (1949) 47-61.

Tibor Nagy, "Les monuments d'un établissement

éravisque romanisé à Albertfalva," *Antiquitas Hungarica* 3 (1949) 49-67 (in Hungarian; summary in French). Pottery of first to third centuries.

Franz Stroh, "Gräberfunde mit Bronzehelmen vom Monte San Gabriele bei Görz," *Germania* 28 (1944-1950) 224-227. Possible connection with Illyrian campaign of Octavian, 35-33 B.C.

Albrecht Dauber, "Römische Holzfunde aus Pforzheim," *ibid.* 227-235. Statuette of goddess, and yoke.

Kurt Tackenberg, "Über einige wenig bekannte Reiterscheiben," *ibid.* 250-258. Variations in type among Germanic ornaments, and probable Egyptian (Coptic) prototypes.

Marianne Grubinger, "Das Schöcklgebiet in römischer Zeit," *Blätter für Heimatkunde (Graz)* 24 (1950) 121-125. (For this and the following three titles I am indebted to Professor H. Vetters of Vienna.)

Walter Heydendorf, "Zur Baugeschichte der römischen Legionslager Albing und Lauriacum," *Unsere Heimat* 21 (1950) 72-76.

Wilhelm Jenny, "Neues zum römischen und frühmittelalterlichen Linz. Nachtrag zur Martinskirche," *Jahrbuch der Stadt Linz*, 1950, 288-298.

Heinrich L. Werneck, *Ur- und frühgeschichtliche Kultur- und Nutzpflanzen in den Ostalpen und am Rande des Böhmerwaldes* (Wels, O. Ö. 1949).

The Migrations and Later

O. Davies, "A Summary of the Archaeology of Ulster, Part II," *Ulster Journal of Archaeology* 12 (1949) 43-76. Early Christian, Norman, and mediæval.

Jean M. Sidebotham, "A Promontory Fort on Tory Island," *ibid.* 98-103. Surface investigation; hut sites with approaches guarded by parallel banks; possibly sixth-ninth Christian centuries.

Franz Miltner, "Zum Siedlungswesen im Norikum der Spätantike," *Carinthia I* 140 (1950) 278-284. Effect of the invasions on cities and villages.

Hans Dolenz, "Spätantiker Grabfund bei Feistritz a. d. Drau in Oberkärnten," *ibid.* 256-265. Pottery of the early fourth century.

Vahan Hagopian, "Notes on the Evolution of Armenia's Architecture and its Influence Abroad," *Armenian Affairs* 1, Nos. 3/4 (1950) 151-158. Chiefly influenced by Byzantine Western Asia up to tenth century, and by Mesopotamia, Persia, and Islam thereafter. Variations in construction because of use of stone rather than brick; embroidery-like sculptured decoration. Influenced Seljuk and Russian architecture.

Günther Haseloff, "An Anglo-Saxon Openwork Mount from Whitby Abbey," *AntJ* 30 (1950) 170-174. Lead piece with Northumbrian vine ornament, dated to the eighth century.

E. Thurlow Leeds, J. L. Barber, "An Anglian Ceme-

tery at Glaston, Rutland," *ibid.* 185-189. Chiefly bronze brooches.

Herbert Maryon, "A Sword of the Viking Period from the River Witham," *ibid.* 175-179. Tenth century wrought steel blade, with inscription inlaid with iron rods.

Lucy Tondreau, "Les fresques de la Chapelle castrale de Mons," *RBA* 19 (1950) 71-82. Old Testament scenes as prefiguring New Testament events; probably eleventh or twelfth centuries.

W. Deonna, "'Salve me de ore leonis.' A propos de quelques chapiteaux romans de la cathédrale Saint-Pierre à Genève," *RBP* 28 (1950) 479-511. Lions and monsters as infernal beasts, often iconographically related to ancient Oriental forms, but used in Christian symbolism as emblematic of Hell, worldly temptation, etc.

Pedro de Palol, "Ponderales y exagia romanobizantinos en España," *Ampurias* 11 (1949) 127-150.

NUMISMATICS

Numismatic Literature, published quarterly by the American Numismatic Society, No. 13 (Oct. 1950) 133-180; No. 14 (Jan. 1951) 181-232.

Willy Schwabacher, "Geldumlauf und Münzprägung in Syrien im 6. und 5. Jahrh. v. Chr.," *OpusArch* 6 (1950) 139-149. The finds at Al-Mina and Ras Shamra.

Aileen Fox, "Two Greek Silver Coins from Holne, South Devon," *AntJ* 30 (1950) 152-155. Tetradrachm of Alexander III and one of Aesillas as quaestor (93/2 B.C.); probably to be connected with Iron Age fort-settlements in neighborhood and possibly result of the trade in tin.

N. Van der Vliet, "Monnaies inédites ou très rares du médaillier de Sainte-Anne de Jérusalem (suite)," *RBibl* 57 (1950) 430-442. Coins from Phoenicia; cf. *ibid.* 110-129.

Henri Seyrig, *Notes on Syrian Coins* ("Numismatic Notes and Monographs," 119, The American Numismatic Society, New York 1950). Pp. 35, pls. 2. Coinage of Tryphon discussed in view of find at Khan el-Abde, and abbreviations on Syrian coins.

J. G. Milne, "Pictorial Coin-Types at the Roman Mint of Alexandria. A Supplement," *JEA* 36 (1950) 83-85. Coin of Antoninus Pius with representation of the slaying of Marsyas.

Hans Winkler, "Fund eines römischen Münzschatzes in Globasnitz," *Carinthia I* 140 (1950) 265-272. Gotbert Moro, "Funde römischer Münzen in Kärnten," *ibid.* 272-278. Second and third centuries.

Felipe Mateu y Llopis, "El Hallazgo de Denarios Romanos de Altafulla," *Boletín Arqueológico (Tarragona)* 4 (1950) 53-58. From Gordian to Valerian.

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BOOK REVIEWS

A Hundred Years of Archaeology, by Glyn E. Daniel.
Pp. 344. Gerald Duckworth & Co., London, 1950.
\$3.50.

The rise of Prehistoric research in the last hundred years from the state of antiquarianism and the collecting of curios to that of a discipline with the aim of disclosing the activity of mankind before written history as described by Daniel makes a fascinating story. The description of the various discoveries, from the early finds in the gravels, caves, bogs, and lakes of Western Europe to the latest finds in Mesopotamia and India, is enlivened by discussions of the development of thought in Europe, of the contribution of other disciplines, such as Geology and Anthropology, to the efforts of the prehistorian, of the techniques developed in the field and in the laboratory (including an interesting account of the use of air photography). The story covers the entire world and is supplemented by a "chronological table of main events".

In a task of this magnitude it is natural that opinions will vary as to what is important, and therefore to be included in the story, and what unimportant. Yet the reader has a right to expect a balanced account with discovery everywhere and by diverse scholars treated in the same manner. This has not been done, perhaps because the book has been addressed to readers in England, and the author therefore had to emphasize the contribution of English scholars especially. We may note, for example, that the early years of the research and the early discoveries are treated in great length, while the important discoveries of the last thirty years are given as a "bare chronicle." It is true that the early discoveries are important and the development of the technique of interpretation may be fascinating; but these can easily be found in a number of well-known books such as Macalister's *Textbook of European Archaeology* Vol. 1, 1923, Osborn's *Men of the Old Stone Age*, MacCurdy's *Human Origins*, etc. We would expect to see the latest discoveries, not to be found in general books, fully treated, and in this we shall be disappointed. There are many omissions that will seem of great importance to scholars specializing in the field. Thus Americanists will be surprised by the omission of a discussion of the South Western, of the Aztec, and even more of the Peruvian discoveries. The students of Mediterranean antiquities will find the account of Greek and Italian discoveries unsatisfactory. The reader is left with the impression that Greek Pre-

historic research ended with Schliemann and Evans. The Cycladic discoveries of Tsountas and his monumental publication of the same are omitted, although the discoveries at Phylakope and even Bent's finds are discussed. The discovery of the remains in Thessaly and the opening up of the Neolithic Age of Greece by Tsountas, even the excavations of Wace and Thompson in that district, and the pioneer research of Leon Rey and Heurtley in Macedonia are also omitted. The research that brought to light the Early and Middle Bronze Ages of the mainland of Greece is entirely forgotten. Thus the excavations of Blegen at Korakou, Zygouries, and the Heraeum, which made possible the clear differentiation of the Helladic periods, the important discoveries of Miss Goldman at Eutresis, of Tsountas and Wace at Mycenae, the German excavations at Orchomenos and Tiryns, the fruitful researches of the Swedish expedition at Asine and Dendra are not even mentioned in the chronological table of main events. To these omissions we may finally add an objection to the title of the book which is misleading. This study is not an account of a hundred years of Archaeology, but a hundred years of Prehistoric Archaeology; and this the author acknowledges in his Preface. Why not say so in the title also?

In spite of these omissions and the overemphasis of earlier years, the book will prove a solid contribution to our increasing bibliography of Prehistoric Archaeology and one that will fill a real need.

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Excavations at Island MacHugh, by O. Davies. Pp. 116; text figs. 16, figs. 31, pls. 8. Belfast Historical and Philosophical Society, 1950. 15 s.

Dr. Davies begins by saying that "a complex excavation carried out slowly is more satisfactory than one hurried through by a big team . . . if the work is divided among assistants, it is more difficult to co-ordinate their results." Since no one but this reviewer ever carried out "complex excavations" in Ireland with a "big team," the reader must judge the following for himself.

Davies worked under many difficulties, the greatest of which must have been a mediaeval castle in the middle of the site and also many trees which apparently the Duke of Abercorn did not let him cut down. These prevented the opening of large con-

tinuous areas, and forced the excavation into many odd-shaped trenches.

The site, an island in a lake in Northern Ireland, was occupied at intervals from prehistoric to mediaeval times. The earliest culture is a relative of Neolithic B in Britain and of the Forest Culture of the northern part of Europe. Here it belongs to the second millennium B.C. and thus overlaps the Early and Middle Bronze Age of Atlantic Europe including Ireland.

It is succeeded by two strata labeled Late Bronze Age. The upper produced a pot "connected with the Hallstatt-invasion series" and is thought to be contemporary with the Roman empire. Such statements call for explanations. One of the interests of Ireland is the picture it gives of the arrival on the edge of Europe of influences from the centers of high civilization. Cultures which succeed one another neatly elsewhere overlap broadly there, and others do not arrive at all. The Iron Age of Europe is very sparsely represented in Ireland. There were Late Bronze Age invasions from Britain which perhaps contained minute influences from Hallstatt (first continental Iron Age), and a few Hallstatt bronzes were imported, but there was certainly no "Hallstatt invasion." It is better to consider these manifestations as part of the Late Bronze Age as is done in Scandinavia. At Island MacHugh the lower "Bronze Age" level produced not only a piece of iron but pottery known from the Christian era. The upper one contained material which could belong to the second half of the first millennium A.D. Both yielded pottery of Late Bronze Age type, but so did the Romano-Caledonian strata at Traprain in Scotland. In short, these strata are not "Bronze Age" or "Hallstatt" but give an unhappily sparse representation of the cultural overlappings of a far later age. Above these were strata of the Middle Ages which yielded abundant pottery.

The excavator's notes have an unhappy way of appearing through the published report. It cannot be necessary, for example, to say, "In 62/20/21—1.0—1.4 at the edge of . . ." After spending considerable time on the abundant plans and sections, I still could not discover which belonged to which. Finally, we are all accustomed to uncut continental books, but a book which is also unbound presents the reader with novel problems.

AMERICAN SCHOOL OF
PREHISTORIC RESEARCH

HUGH HENCKEN

Základy Hallstattské Períody v Čechách, by Jaroslav Böhm. (Nákladem společnosti Československých Prehistoriků). Pp. 299, figs. 103. (With German summary, *Die Grundlagen der Hallstattperiode in Böhmen*). Praha, 1937. (Reviewed primarily from the German summary.)

This study represents an important milestone in the revision of the earlier concepts of the Hallstatt period. During the nineteen thirties the cumulative results of intensive work throughout Central Europe made it plain that the Hallstatt cemetery could not be considered as a determinant for assessing an early Iron Age culture which blanketed most of Europe. Similarities and differences between regions indicated that the concept of a Hallstatt period must be extended both in time and space, and the evidence precluded the influx of a single group bearing a Hallstatt type of culture or the diffusion of a culture complex associated with the spread of iron. The categorical identification of the Hallstatt period with the Early Iron Age, as Böhm points out, represented a carry-over from the early three-stage evolutionistic type of thinking. Although the term Hallstatt as a type-site designation seemed no longer valid, its usage was gradually broadened to include stylistic and cultural similarities, with or without the presence of iron, which covered wide territories over a long period of time and overlay distinct regional differences. It can now be described as a general level of culture. In his broader interpretation the author attributes the major foundations of the Hallstatt culture to the interrelations, expansions, and fusions of the Bohemian-Pfalz and Sudeten-Danubian Tumulus groups, the Lausitz culture, and the local developments within the Carpathian basin.

This work is an analysis of the Younger Bronze Age and the Older Hallstatt Period in Bohemia with due regard to influences from without and to their own impact on neighboring areas. The bulk of the discussion is devoted to establishing and describing the sequences in the different areas of Bohemia, tracing their distributions, and analyzing their components in terms of continuity and diffusion.

In plan the discussion treats in turn the Tumulus cultures of the West and Southeast, the Lausitz culture, the origin and development of the Knovíz culture of central Bohemia, and the Milaveč culture of the south. These geographic groups are further divided into time phases which, although identified by site names, are determined by detailed comparisons and established for much wider areas. Representative assemblages are copiously illustrated. The geographic distributions of the larger groupings in Bohemia and in Central Europe as a whole are presented in a series of five maps. External relations and connections of the Bohemian groups, Bohemian relationships with the South German urnfields, absolute chronology, and some of the wider implications make up the final chapters.

Böhm's major conclusions can be summed up as follows:

- (1) Bohemia lay outside the original area of tumu-

lus development, the centers of which lay in Bavaria and Lower Austria. During the Early Bronze Age one wave reached north to the borders of the Aunjetitz area in Central Bohemia, another wave to the east penetrated much farther north. During their third and fourth cultural phases the Tumuli people of South Bohemia overran the Aunjetitz area.

(2) By eliminating the areas where the Lausitz culture appears only as a developed culture style or in mixed contexts, Böhm sees its area of origin as the Oder region, well outside of the classical Aunjetitz district. It was formed by the impact of the eastern wave of Tumulus people upon the local settlers.

(3) (a) Once formed, the Lausitz culture extended southward into East Bohemia via the Glatzer depression, where it is represented by three phases, the oldest equating with Seger's Style A, the second or transitional with Buchtela's Old Lausitz, the third with Seger's Style B. A fourth, equivalent to Style C, is the Silesian and seems to be an influx from a secondary center, perhaps in Moravia.

(b) A second Lausitz stream entered North Bohemia by way of the Elbe drainage. Its local development followed a similar but independent course. Its third phase, Libochovany III, is stylistically akin to, and contemporaneous with the Silesian of Eastern Bohemia, but it shows local differences. Apparently there was no contact with Central Bohemia.

(4) In Central Bohemia the Tumulus influx from the south seems to have submerged the existing Aunjetitz culture, but in turn underwent some modifications, although only a few Aunjetitz elements survived in a recognizable state. The southward trend of Lausitz into Central Bohemia combining with this altered Late Tumulus complex produced the Late Bronze Age Knovíz series.

(5) During the Early Knovíz period an influx of people from Central Bohemia penetrated the Tumulus area of South Bohemia to form the Milaveč sequence. The formative Milaveč phase is closely related to formative Knovíz, but later Milaveč phases lack many characteristic Knovíz forms. The unmixed Lausitz complex never penetrated South Bohemia but was passed on in a mixed Knovíz matrix.

(6) Central Bohemia shows a long tradition beginning in the Neolithic which is lacking in the east and south. South Bohemia relates to the Sudeto-Danubian Tumuli, north and east Bohemia to the Lausitz-Oder sphere, and the northwest to the area north of the Erzgebirge.

(7) Since late Lausitz interrelates with late Tumuli, the oldest Lausitz must be earlier. The old Montelius III = Bronze Age D equation thus does not stand, and there is consequently no even parallel between the Northern cultures and Lausitz, which must therefore be analyzed *per se*.

(8) In relating the Bohemian developments with those of the South German urnfields, Böhm calls attention to the lower Rhine, Swabian-Frankish, Upper and Lower Bavarian, Upper Austrian, Frankish Pfalz, and North Tyrolean groups. While recognizing that this expansion is predominantly Lausitz in character, he raises the question as to how far it is the product of an original Lausitz nucleus and how far of already mixed and blended cultures. He identifies two major streams. The Thuringian, almost pure Lausitz, followed the Main and is found along the Rhine and in the northern Urnfield groups. The Knovíz-Milaveč stream, a mixed Tumulus-Lausitz complex, reached Upper Austria and Bavaria, absorbed further Tumulus elements, and reached the northern Tyrol, where it came within the borders of Peschiera influence. Another branch of this stream reached the Danube in the Alpine foothills. Hallstatt B is not found in equal strength throughout, nor does the BD-HA-HB sequence always appear in complete form.

The general trend toward revised dating in the Mediterranean area renders a discussion of Böhm's absolute chronology unnecessary. There are a few points in the Central European sequences which correlate with those of the Aegean and Italy, but the duration of some of the earlier periods must be estimated.

For Bohemia his cultural equations in the admirable table on page 231 deserve attention. This table divides Bohemia into four provinces, the south and west, central, east and northeast, and north, and equates their various phases with the Reinecke, Sophus-Müller, and Montelius systems. Of major interest is the correlation of the early Křtšov-Smedrová and Chodouň-Zelený phases of the Tumulus cultures of the south and west with Aunjetitz II in the rest of Bohemia, and the extension of the later Kbely-Řepeč and Obrnice-Třebivlice phases of the same series into Central Bohemia. Since the end of this last phase is synchronous with the Hvozdnice-Záhoří or earlier phase of Lausitz in the east and north, it falls in Reinecke's C 2 rather than in D. The Lausitz sequence continues through Reinecke's Hallstatt A; the subsequent Silesian occupies all of B and part of C.

In Central Bohemia the third phase of Knovíz (Žatec-Jenšovice) equates with Reinecke Hallstatt A, the fourth phase (Štítary-Hostomice) with B. Bylaný I, a continuous development, runs through C and D, and Bylaný II correlates with La Tène A.

In synthesizing Böhm sees two cultural districts, the patterning of which appears in the Eneolithic period. In the Alpine-Danube area the major cultural factor is that of the Tumulus people, with later cultural accretions derived from Lausitz. The Tumulus people in the course of their development pressed into

the already settled Early Bronze Age Aunjetitz territory. Under the influence of the Tumulus groups the Lausitz culture arose in the Oder region, and expanded in turn.

One wave of Lausitz expansion went into the sparsely inhabited area of east Bohemia and north Moravia. Another penetrated the secondary Tumulus area (the former Aunjetitz culture zone of central Bohemia where the older inhabitants were already acculturated). This was followed by rapid fusion into the relatively uniform Knovíz culture.

With further expansion two streams developed, a northern or relatively pure Lausitz complex working westward, and a mixed complex diffusing south and southward from the Knovíz area of central Bohemia to the Alpine Border regions.

The true Hallstatt period of central Europe is primarily a period of stabilization marked by the emergence of broad eastern and western centers which influenced wide areas. Influences from Italy were felt in Hallstatt B, primarily in the Alpine centers.

In a final discussion the author concludes that since the Lausitz people in their western expansion played a strong role in the Celtic development, they could not have been of Illyrian speech.

As a contribution to the understanding of the Hallstatt culture of central Europe Böhm's painstaking establishment of local culture groups, his resolution of them into their basic components, and his progressive synthesis of them into major patterns is an impressive piece of work. There are still gaps in the record, and some of Böhm's distinctions, admittedly based on typology, need checking by adequate excavation. It is perfectly clear, however, that in central Europe the course of the Bronze Age development was tortuous, and that the Hallstatt period throughout, despite its generalized overwash of similarities, was actually the product of diverse and complex patterns of local culture development, contact, population movement, and cultural admixture.

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The Lascaux Cave Paintings, by *Fernand Windels*. (Translated by C. F. C. Hawkes). Pp. 139, 160 monochrome + 8 colored figs. The Viking Press, New York, 1950. \$10.00.

The English edition of this magnificent book is an almost exact reproduction of the French version originally published in 1948 in Montignac-sur-Vézère. In every respect it is up to the highest scientific standards and exceedingly well written, as are the three introductions by the Abbé H. Breuil, Prof. C. F. C. Hawkes (under whose able supervision the English translation was prepared), and M. A. Leroi-Gourhan. Great credit is due M. F. Windels for his

skill in producing the magnificent series of one hundred and sixty monochrome photographs, in addition to eight plates in color, which are luxuriously reproduced; also to Mlle. Annette Laming for her part in the preparation of the text. This makes no pretensions toward being a definitive work on the subject, but within prescribed objectives, the writer has skillfully avoided controversial issues, an authoritative discussion of which would have required a highly specialized background.

The Lascaux Cave was discovered in September, 1940. It is situated 1 kilometer south of the small village of Montignac (Dordogne) and 25 kilometers up the Vézère from the famous town of Les Eyzies. The extraordinary series of remarkably preserved and fresh-looking prehistoric wall paintings and engravings which it contains are regarded as being among the finest of all achievements of their kind ever discovered. Called the "Versailles of Prehistoric Man," Lascaux thus ranks among the world's oldest and most impressive art galleries. It has been completely sealed off from the outside world since late Upper Palaeolithic times, and it is now generally believed that the majority of the paintings are Upper Périgordian (Gravettian) in date—Phase 2 in the Upper Palaeolithic art sequence of Western Europe. That they were produced during a time of climatic amelioration, possibly the one known as the Aachen Retreat, is borne out by the fact that the animals depicted belong much more to a steppe and forest type of fauna than they do to a colder tundra group. For example, there are no mammoths and no reindeer shown, but there are many horses, a considerable quantity of cattle, bison and several ibexes. On the basis of the exceedingly skillful and very realistic portrayal of the forms represented, it is at once apparent that the Lascaux paintings come from the hands of men who knew their models intimately at first hand.

One of the most interesting features of the art of this cave is the tremendous vigor with which the animals are shown. They are by no means static; rather they are full of movement and even possess a poetic feeling. Furthermore, there is a series of intentionally composed scenes, including groups of running horses, red deer crossing a river, and the interesting black outline drawing of the hunter and bison with its entrails protruding from the wound in its belly. Doubtless this place served as a sanctuary or temple where Upper Palaeolithic man practiced his hunting magic, for many of the images are shown pierced with darts or spears. Yet Lascaux as a hunter's sanctuary, and Lascaux as a monument of Stone Age art are clearly of one and the same inspiration, and the salient fact remains that this place ranks among the most remarkable collections of primitive art ever brought to light. Indeed the Cave of Lascaux, together

with other recent discoveries at Angles-sur-Anglin, La Colombière, etc., suggests that the question of the existence of local artists or schools or art during Upper Palaeolithic times is in urgent need of careful investigation.

As regards the evidence for establishing the age of the Lascaux murals, the Abbé Breuil considers that blocks with paintings and engravings on them fallen from the walls of the Blanchard and Labattut rock-shelters, Sergeac, and La Ferrassie (Dordogne) exhibit a stage in art development which is related on stylistic grounds to the figures at Lascaux (*cf.* H. Breuil's paper of 11 October 1940 read to the *Académie des Inscriptions et Belles-Lettres*). These fallen blocks were found in occupation layers of the end of the Aurignacian and the Upper Périgordian Periods. It is on the basis of these finds, in addition to other comparable material from the Pyrenees and Northern Spain, that Breuil has been led to recognize two main cycles of Upper Palaeolithic art—an earlier one with a contorted perspective ("perspective tordue") of the horns, which is pre-Magdalenian (and very probably pre-Solutrean), and to which the majority of the Lascaux paintings belong. In the second, or later, cycle the perspective is very modern-looking. It is considered to begin with the Solutrean and to cover all the Magdalenian. Since in the earlier stages of this latter cycle the first tradition, which includes the art of the East Spanish rock-shelters, still survives, the possibility that some of the most recent-looking paintings at Lascaux are the work of Solutrean or even very Early Magdalenian artists cannot be ruled out.

This new edition, the first full photographic treatment for English readers of a major painted cave, is destined to contribute to a broader understanding of the problems of Upper Palaeolithic art. It is a thrilling experience to see this cave. If such a visit is impossible, the alternative is to take in what Lascaux has to offer through the medium of this book. Certainly no student of the history of art can afford to pass up such an opportunity of examining these truly magnificent figures, whose state of preservation, artistic quality, number, and sheer size mark them out as one of the most impressive and inspiring spectacles it is possible to behold.

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The Körös Culture, by I. Kutzian. *Dissertationes Pannonicae ex Instituto Numismatico et Archaeologico Universitatis de Petro Pázmány nominatae Budapestinensis Provenientis*. Ser. II, no. 23. Pt. I, pp. 56. Pt. II, pls. 75. Budapest, 1944. 100 Swiss frs.

This study of the oldest neolithic culture in the Tisza River area of the Hungarian plain endeavors to

interpret the finds, establish their chronology, their origin and subsequent geographical expansion. The discovery and publication of this material are of recent date. In 1929 Ferenc Tompa conveniently designated the finds as the Tisza culture; G. K. Nagy had already differentiated a part of them as the Körös group, its local coloring being due, he thought, to influence from the southeast, i.e. Greece; and by 1932 János Banner had definitely settled the question of the independence of the Körös group, but he dated it at the end of the Neolithic period. However, the Vinča finds to which it is so closely related had not been published at that time.

This monograph does not present much new material, except for some heretofore unpublished vases, but rather makes a thorough re-examination of all the Neolithic finds which comprise the Körös culture. The first part of the study describes the finds, the second discusses their relation to similar material in other areas.

The sites of the Körös culture are along rivers and lakes where fishing and hunting were the chief occupations. Shells appear in the settlements in heaps but oddly enough were used rarely for personal adornment. The houses of wood frame and mud plaster show an irregular oblong ground plan. Refuse pits are common, filled with animal bones, shells, pottery; sometimes they were used for burials. A total of nineteen graves are known, but there were no separate cemeteries. The skeletons lay in contracted positions, with no uniformity regarding orientation. The pottery is largely a coarse monochrome ware, and a little painted ware. Besides the usual variety of bowls and cups the characteristic type is a pithos or bin, globular and asymmetrical in body, with thick walls and a roughened surface decorated with lugs or incisions. One other noteworthy shape is a globular vase resting on feet, usually four, but the number varies from three to twelve. Much of this pottery is decorated with what the author calls "nail-incisions," an unsatisfactory term, it seems to me, for a Neolithic technique.

In his interpretation of a religious significance for some of the finds Kutzian is at variance with other scholars. There is the much disputed object which he identifies as a lamp, but which Childe called a libation table and which is regarded as a vessel used at altars for libation by Vassits, Fewkes, and Korošec. Banner regarded it as a lamp but not for cult purpose since it is found in great quantities and usually in refuse heaps and is of small size. Kutzian argues from the same evidence that it could not be a lamp for ordinary use, for he believes that primitive man had sufficient light from the open fire, and so it must be a ritual object associated with fire worship. He regards the numerous steatopygous figurines, similar to those of Neolithic

Greece, as belonging to a cult of fertility. It is interesting to note that some of these figurines were made in two pieces, lengthwise, and then put together, a technique known at Sesklo, except that the division there was horizontal. The author also believes that the *pintaderas* are for ritual purpose and the marks on them magic signs.

The Körös finds are seen as part of that widespread Neolithic culture extending from the Hungarian plain to the Greek mainland, with closest connections in the finds of Vinča I, Starčevo, and Sesklo, especially in the A1 and A2 wares, but the ramifications lead as far afield as Choirospilia in Leukas and the Apulian sites of Molfetta and Matera. The cultural unity of this widespread area is traced in the similarity of burial rites, figurines, type of house, and pottery, with allowances for local differences. The author believes that Greece is the key to the problem of the origin and that the Körös culture was the result of a migration from mainland Greece, but he adds: "The reason for this migration, whose direction is unusual, is not yet clear to us" (32). There are still too many gaps in the Neolithic picture of the Balkans as well of the Aegean area. Chronologically he places the Körös culture as contemporary with Sesklo I and the settlement at Hadzimisiotiki and indicates a general date of the fourth millennium.

Since so much emphasis in this study is given to geographical considerations it is unfortunate that there are only two maps, one showing the sites of the Körös culture in the Tisza River valley, the other being an enlargement of one section where the sites are densest. With the exception of the names of four rivers there are no identifications whatever on the maps, not even the latitude and longitude are marked. Such important sites as Vinča and Starčevo, to which six and two pages of text are devoted respectively, should be shown. An adequate map of Hungary would aid the reader in his struggle with such a sentence as this: "We find many settlements of this culture in the territory lying between the Tisza and bordered by the tributaries of this river (the triangle bordered by the Hármos-Körös, the estuary of the Horto-bágy, Berettyó, Sebes-Körös, Fehér-Körös, Kurca, Százázér, the Maros and Aranka, Bega and Ó-Bega respectively and the Bega-channel, Temes and Karas" (12).

Typographical errors are so frequent that in all probability the typesetters knew little English but the text needs complete revision in sentence structure, which is at times confusing, deletion of the superabundance of commas which do not facilitate smooth reading, and the correction of the vast number of misspellings. A few examples: mouthes (*passim*), varts (6), floatings (7, 13), prophiled (4), institue (4), whith (9), eclisively (24); and such usage as mouthpart (4), wast (21), seldomer (9), flooring (6), jewels for

jewelry (9); while the phrase "waterly places" (20) is awkward. There is constant use of the hyphen: find-material, spindle-whorls, vessel-type, vessel-walls, vessel-smoother, pottery-type, nail-modellings, grave-goods, earth-graves, motive-wandering. Proper names appear both with and without the hyphen, as Hadzimis (23) and Hadzimis (21).

The value of this study lies chiefly in the assembling of the Körös material into one publication accompanied by a volume of excellent plates illustrating both the Körös finds and comparative material from other sites. It is now possible to recognize that some of the pieces of coarse ware from Sesklo which Tsountas could not reconstruct into shapes belong to the bin type of the Körös pottery. Ninety-one sites are listed for the distribution of this culture in Hungary and it is to be hoped that many of them will be investigated. Meanwhile this detailed study of one area is a valuable addition to our increasing knowledge of the Neolithic period in the Balkans.

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Chronologie der jüngeren Steinzeit Mittel- und Südosteuropa, by Vladimir Milojčić. Pp. xii + 137, 3 figs., 16 charts, 41 pls. Verlag Gebr. Mann, Berlin, 1949.

One of the most prolific writers in the post-war era on the subject of European prehistory, and especially its chronology, is Dr. Milojčić of the Munich University *Institut für Vor- und Frühgeschichte*. His first studies on Serbian neolithic culture have been broadened to include all of eastern Europe, and in seeking the solution for chronological problems he has inevitably been carried through the Aegean to the Near East. The last few years have seen several articles on Balkan prehistory from his pen, many reviews which contain substantial contributions and, most important of all, the present volume on European chronology. Broad though the title of this work is, the contents cover an even wider area and range of time. The tremendous amount of research which has gone into this volume is belied by its size, though not by the copious footnotes. The writer has controlled almost all the published evidence for the chronology not only of the entire Mediterranean area, but for most of eastern Europe as well.

Though not so divided by the author, the book seems to fall into two parts. The first covers the sections from Egypt, Mesopotamia and Palestine-Syria, through West Anatolia, Crete, Greece and Macedonia, and here Milojčić is apparently working at second hand, that is, using the published reports but having little contact with the artifacts themselves. In the second part, covering Bulgaria, Yugoslavia, Hungary, and Germany, the author is clearly on home territory

and has used not only the publications, but much unpublished material as well, which adds weight to his arguments. There are a few obvious and curious omissions in the study, despite its great scope: Iran, with which there are Aegean connections of primary chronological importance, is nowhere mentioned; Central Anatolia, while alluded to from the periphery, is not given the attention it deserves; but strangest of all is the avoidance of any discussion of the whole region of Rumania with its important Transylvanian and Wallachian cultures. In the great chronological table at the end of the volume, Alishar levels are charted, as are also the cultures of southwest and north Rumania, but without reference in the text. On pages 3 and 38 there are welcome bits of information to the effect that there can be no question of a derivation of Dimini culture from the Erösd-Cucuteni A complex, since the latter is much the younger, but these statements are not enlarged upon.

The method used in approaching the solution of the chronological problems under discussion is the obvious and only possible one; it proceeds from the establishment of the relative chronology within each cultural region to the inter-regional connections supported by significant imports or general cultural similarities, which go to build up a relative chronology for the whole of the eastern Mediterranean, the Aegean, and then of Southeast and Central Europe. All attempts at absolute dating must go back through these inter-relations to Egypt or Mesopotamia, where alone of all the regions historical documents give dates throughout the third and even into the fourth millennium. The cultures of those regions which have direct contacts with these two sources can be dated with fair accuracy through the third millennium; these include the eastern Mediterranean and Aegean areas. North of Greece, in the Balkans and Central Europe, the contacts are all secondary through Greece or West Anatolia, and here absolute dates are less accurate. It is thus logical to begin with an examination of Egyptian dates, and here Milošević has given an excellent, succinct account of the problems involved and the various solutions attempted. He ends by accepting a most recent chronology of H. Stock which, while conventional in placing the beginning of Dynasty XII just after 2000, seems to be somewhat telescoped at the upper end, where Dynasty I begins at 2900. A chronology so recently published has not yet stood the test of expert criticism, but it would seem to involve certain difficulties, especially with the dates for the Jemdet Nasr phase in Mesopotamia, with the end of which Dynasty I is in direct contact. Here Milošević accepts the dates of Cornelius and Ungnad, bringing the end of Jemdet Nasr to 2900 or 2850, but more generally accepted dates for the period are 3200-3000,¹ which would necessitate the

moving of the beginning of Dynasty I back to 3000 at least, a date which I believe would find more general acceptance than that chosen by Milošević. There should be a proportional lengthening, I believe, of the first three dynasties, for a date around 2600 for the beginning of Dynasty IV is now accepted, as are the rest of Stock's dates through Dynasty XII. Since all the absolute dates given hereafter by the author depend on this Egyptian scale, its correctness is of fundamental importance, and it is the obligation of the outsider to adopt a chronology which has met general acceptance among specialists in Egyptology, rather than to subscribe to what seems as yet a somewhat extreme solution. Be it said to the author's credit that he has rejected a further attempt by Stock to lower the dates for the first dynasties another eighty years.

Beginning with the Palestine-Syria area, the relative chronology of each successive region must be pegged to those with absolute dates. For the west coast of Asia this is not difficult. But again for Palestine, Milošević's absolute dates are a century lower than those of Albright as given in his latest edition of *The Archaeology of Palestine*, and even more recently in a chronology quoted by G. E. Wright in a review of *Megiddo II*.² In dealing with Syria and Cilicia, Milošević rightly uses the Judeidah phases as his fundamental scale, but he can know extremely little about this as yet unpublished excavation, since his knowledge is limited to the brief synopses of the phases given in a syllabus for a course at the University of Chicago. While his deductions concerning the relations between the Amouq phases and the Mesopotamian sequence are essentially correct, those having to do with Anatolian connections are not so reliable. Mersin, as the Cilician type site, is given brief mention, but it is incredible that Tarsus is not considered at all; the name does not appear in the index of sites and Milošević has made no use of Miss Goldman's preliminary reports, although the report on the 1938 campaign³ is especially full of material of the greatest importance for connecting the middle Troy levels with the Amouq sequence.

That Milošević skips from Cilicia to West Anatolia without considering the whole central Anatolian complex has already been mentioned. He does, however, make frequent references to sites in this area, especially Alishar and Alaca Höyük, which are confusing to the reader because he fails to describe the nature of the evidence from these sites. Once in West Anatolia, the argument naturally centers on Troy. For the pre-Troy phases, the material from near by Kum Tepe and from Tigani on Samos are most pertinent. Milošević has placed great weight on material from Kum Tepe which he knows from only the briefest preliminary reports. He has not used the

Turkish booklet by Koşay and Sperling⁴ in which are the only published profiles and illustrations of the Kum Tepe pottery. This is still meager evidence, but I believe that the final publication will show reason to equate the beginning of Kum Tepe with the Early Neolithic of Greece. There is nothing so early from Tigani where the material, divided stylistically into phases, all falls in the Middle and Late Neolithic periods. Such stylistic arrangements are highly unreliable and do not take into account the fact that greatly diversified wares might be contemporaneous and, further, that poor quality is not indicative of early date. The evidence of the Tigani material as a means of lowering the date of the beginning of Troy I carries no great weight. This is even more true of the attempt to accomplish the same purpose through the evidence of the Jemdet Nasr seal from Troy. With regard to this seal⁵ Milošević is badly confused. Contrary to his statement, its provenience is known, for Schliemann states that it was found in the palace in the burnt level,⁶ that is his level III, or the end of the present level II. Therefore, whether it be Jemdet Nasr or not, and both Frankfort and Bittel believe it is, it has nothing to do with the date of Troy I, for the object is badly out of place. It does not signify that the date of the beginning of Troy I must be after the beginning of the Jemdet Nasr period; rather, the seal shows that the end of Troy II is this late, but that is obvious without the evidence of the seal. There is firmer evidence for dating the early levels of Troy in the comparisons with Cilicia and the Amouq. Milošević's dates for Troy III-V agree with those of Blegen, for there is ample evidence, such as the Troy IV type beaker in Judeidah J, to assign these levels to the time of phases J and early K in the Amouq, ca. 2300-1900. While the end of Troy II at 2300 is fairly sure, the date of its beginning is not so clear. In the final publication, the excavators of Troy make no attempt either to assign absolute dates to the period or to make comparisons outside the Aegean area. Judging from an examination of the published Troy material by a group including the excavators of Judeidah, it seems clear that Troy II must be equated not only to phase I, which Milošević has done, but that it goes back through part of H as well. In view of this, Blegen's dates, 2600-2300, seem better than those of Milošević, 2500-2300, and the longer span is further supported by the fact that there are eight clearly defined architectural phases within Troy II. It is equally apparent from comparisons with the Amouq that Troy I is to be equated to the earlier part of phase H and the later part of G, so that even on Milošević's low chronology the beginning of Troy I must be put back to about 3000, as Blegen has suggested in the final publication.⁷ In view of the 4.00-4.50 m. of deposit in Troy I and the fact that there

are ten architectural phases within the period, the span of four hundred years does not seem excessive. Kum Tepe Ia and Ib must then fall back into the fourth millennium. These correlations, however, are based on material which Milošević could not know and for which he thus cannot be held responsible.

In turning next to Crete, Milošević is again dealing with an area which had direct contacts with Egypt already in the early part of the third millennium, contacts which are of the greatest importance for assigning absolute dates to Crete and, in turn, to Greece and the Balkans. Here again the dates around 2000 are definite, for Middle Minoan I must begin shortly before the beginning of Dynasty XII. Early Minoan II to Middle Minoan I are shown by the button seals to equate with Dynasty V-XI, while Pendlebury has pointed out other similarities between Early Minoan II and Dynasty IV, so that Early Minoan II goes back to about the beginning of Dynasty IV, or 2600, the date assigned by Milošević. For the period before 2600, however, Milošević has oversimplified the picture of cultural development in Crete. His chart of the periods on page 36 presents the picture as known from Knossos, where there was a very short Early Minoan I manifestation following upon an extended Late Neolithic and sub-Neolithic phase. However, it has been pointed out by the excavators of Crete that the Early Minoan I phase in the eastern part of the island began long before it did in the center and that it co-existed with the extended Neolithic type culture there. The evidence is too definite to be lightly brushed aside by one dealing with it at a distance. The question of when the Early Minoan I phase began at Knossos is closely tied up with the dating of two fragments of Egyptian stone vessels found at the top of the Neolithic level. Milošević has placed much greater importance on the evidence of these fragments than they deserve; both Pendlebury⁸ and Matz⁹ have dismissed them more lightly. Besides, in his use of the stone fragments Milošević has violated an important principle in dealing with imports: the *terminus ante quem non* supplied by any import is the date of its earliest possible appearance in its native region. For both fragments in question this date in Egypt is Dynasty I, so that the stone bowls say only that the end of the Neolithic at Knossos cannot be before some time during Dynasty I. One can argue long about what is the most likely time in Dynasty I or later that these pieces found their way to Crete, and under what circumstances, but these are subjective speculations. The only fact is that at Knossos the end of the Neolithic phase lasted at least into the time of Dynasty I in Egypt; this has nothing to do with the date of the beginning of the Early Minoan I phase in East Crete. On other grounds there are reasons to equate

this, and the contemporary sub-Neolithic of Central Crete, with early Troy I, and both should be carried back to about 3000.

The Cretan absolute dates are immediately applicable to the Greek mainland and to the Cyclades, the latter of which Milošević passes over with but few references. The date of 2000 for the end of the Early Helladic period is now generally accepted. It is obvious that the significance of the most important single equation for dating the earlier phases of Early Helladic has not been sensed at all by Milošević. This comes from the occurrence already in the middle levels of Troy I of imported, developed Early Helladic Urfinis ware. Blegen has most recently stated the equation as follows: "All that can safely be said at the moment, then, is that the appearance of imported Early Helladic Ware in the middle phases of Troy I can hardly be anterior to the middle stages of the Early Bronze Age in Greece and the Cyclades."¹⁰ Thus, Early Helladic II has begun by the middle of Troy I, which even on Milošević's scale comes at 2600; yet this is the time when he places the beginning of Early Helladic I. But if, as we have suggested, Troy II is to begin at 2600, then Early Helladic II must go back still earlier to about 2700. Early Helladic I must then go well back toward 3000, like its contemporary, Early Minoan I. That the Early Cycladic culture goes back at least this far is shown by the occurrence of Cycladic-type pottery in the earliest Early Helladic I levels at Eutresis and by the bird pins like those of Thermi I. That it may have begun even earlier, in the latter part of the fourth millennium, is indicated by the Jemdet Nasr type seal found on Amorgos in a very early Cycladic context.¹¹

Dr. Milošević has argued to prove that the Dimini phase of the Greek Late Neolithic cannot be contemporary with the Early Helladic I culture; the argument will apparently be presented more extensively in a book on the chronology of the Neolithic period in Greece which is now in press. My own arguments to the contrary, presented some time ago,¹² still seem valid. If the contemporaneity of the Greek Late Neolithic with at least the earlier part of the Early Helladic I period be granted, the Dimini culture can be brought down into the third millennium, ending about 2800; if not, the Dimini culture must be put back entirely into the fourth millennium. The origin of the enigmatic Dimini culture is dismissed with the simple statement that it was certainly a north to south movement which brought it into Thessaly and that it originated in West Thrace. One asks immediately what there was in this region, not derivative from Thessaly A, that could serve as the ancestor of Dimini. But since this is one of the least known areas of the Balkan peninsula, the guess is safe until further test can be made. In discussing the earlier Sesklo or

Thessaly A phase, Milošević has confused some of the wares and their sequence. The fine vase on pl. 7, 5 is one of the best examples of A3 α ware, is thus earlier than the standard A3 β , and is not to be confused with the later A3 δ or A3 ϵ , as Milošević has done. The cup on pl. 6, 6 is chosen as a representative of both the earlier and the later type of A3 β ware. But the gravest error is in what Milošević has chosen to call the pre-Sesklo phase, represented by the pottery on pl. 5. This is Thessalian A2 ware, for which there is nowhere any stratigraphic evidence that it is earlier than the other pottery of phase A. On the contrary, all evidence points to its contemporaneity with the later A phase and in part with Thessaly B as well. The fault is the more grievous since this hypothetical pre-Sesklo ware has been widely used by Milošević for comparisons with Balkan pottery; there is nothing in Thessaly earlier than Sesklo and the only thing that might be considered pre-Thessaly A is the very simple, completely undecorated pottery from the very bottom of the Sesklo accumulation which has been equated with the Early Neolithic of Central and Southern Greece.

For Macedonia, it is certainly incorrect to say, as Milošević does, that excavations thus far have given us an almost complete picture of the prehistoric cultural development of the area. On the whole, the digging has been of the most meager kind, with sizable areas opened only at Servia and Olynthos. Even the pottery sequence is open to doubt, and outside of pottery we know extremely little. Yet certain equations are tenable, for the beginning of Servia is certainly an offshoot of Thessaly A, towards its end. Further work at Polystilo and Akropotamos should help much to elucidate the subsequent development; for Akropotamos Milošević has not used the fuller report in *AJA* 45 (1941) 557-576. The Late Neolithic certainly includes some reflections of the Dimini culture. Milošević has misunderstood Heurtley, who he believes said that the Early Bronze Age in Macedonia may have begun earlier than Early Helladic to the south, that Macedonia was the road by which this Anatolian culture entered Greece. But Heurtley has definitely equated the beginning of the Early Bronze Age in Macedonia with Troy II at the earliest, for there was a piece of a Trojan beaker in the lowest Early Bronze level at Kritsana.¹³ Since the beaker makes its very first appearance in Troy IIc,¹⁴ the absolute date for the beginning of the Macedonian Early Bronze Age cannot be before 2400 on Milošević's scale, or about 2500 if one accepts the higher dates. This error of at least two hundred years must profoundly affect Milošević's dates for regions to the north, for which comparisons with Macedonia are so fundamental.

Beginning with the section on South Thrace, there

is a great difference in the treatment of the material, apparently owing to the author's greater familiarity with it. Here the emphasis is on the establishment of the relative chronology for each region, and in each case there is a rather lengthy description of the main sites and their stratigraphy, and of the cultural development in the region. Datable imports are rare and synchronisms must be based on significant cultural similarities. For the whole region of Bulgaria, which is treated in the sections on South Thrace and the Lower Danube, Milošević has not used the excellent study by Gaul except as an after-thought, adding references to the illustrations to some footnotes. In the cultures of the Vardar-Morava Basin, to the west of Bulgaria, Milošević sees the two Neolithic phases and the Early Bronze Age as a northward extension of the Macedonian cultures. Just as Gaul had considered the West Bulgarian Painted Pottery Culture as derivative from Thessaly A, Milošević sees a further extension of these same Greek cultures into North Serbia and the Banat. The Starčevo painted pottery, derived from Serbia I, an offshoot of Thessaly A, is the earliest. Milošević's use of the term "barbotine" in describing incised and impressed wares of the Thessaly A2 type is most confusing, for that term usually signifies an entirely different ware with plastic decoration. Starčevo has this A2 type ware in its lowest levels, below the painted pottery, and Milošević relates it to the hypothetical pre-Sesklo phase in Thessaly. This ware probably reached Starčevo and Thessaly from a common source at about the same time, before the latter part of the Thessaly A period, when the movement northward from Thessaly to Serbia to Starčevo took place. Thus, though the A2 type is stratigraphically earlier than the painted pottery at Starčevo, it is not so in Thessaly, and the equation should not be that lowest Starčevo is before Thessaly A, but that it comes during Thessaly A. Milošević's comparison of glazed wares from the middle level at Pavlovci, from Serbia Late Neolithic II and from Vinča A, with Neolithic *Urfirnis* pottery of Greece is based on a misunderstanding of the nature of the Greek ware, which is practically limited to the Peloponnesos and Central Greece, with a few fragments intrusive in southern Thessaly. It is definitely a Middle Neolithic ware and I know of no good evidence for its continuation in the Late Neolithic period. The shapes are quite different from those of the "varnished" ware at Serbia, with which the more northern manifestations are similar. The only connection is a surface coating which has an inherent lustre, but even this seems different, to judge from Heurtley's description.¹⁵ Heurtley does not equate the Macedonian variety with the Greek and Milošević has probably been misled by the footnote in which Heurtley says that the Serbia ware might also be termed "*Urfirnis*,"

which it very properly might, but there are several reappearances of glazed wares in the Aegean after the so-called Neolithic *Urfirnis* and they are not necessarily contemporary. The glazed wares of Pavlovci and Vinča A are like those of Serbia; they have no connection with Neolithic *Urfirnis* ware, which is earlier. Milošević again speaks of pottery like the Neolithic *Urfirnis* at the bottom of the site of Sarvaš in Syrmia; this too must be equated with the Macedonian "varnished" ware. But in this region and the area above the Danube, I can only accept the author's reconstructions of the relative chronologies and his dates; it is for others, who know these fields as he does, to criticise his work.

Milošević's conclusions are broad, interesting and of great importance. He sees three cultural horizons connecting Central and Southeast Europe with the Aegean: (1) the West Balkan painted pottery culture, of which Sesklo is a southern and the Starčevo-Körös complex a northern offshoot, with possible origins in the eastern Mediterranean; (2) the so-called "Danubian" black-polished ware complex found all the way from the Aegean to the Danube and spreading from south to north; and (3) the Aegean Early Bronze Age culture which, again spreading northward, brings the Bronze Age to the Balkans and Central Europe. This northward movement of cultures, already sensed in the Greek peninsula and carried a step farther by Gaul in his derivation of the earliest Bulgarian culture from Greece, is given its strongest advocacy in this work of Milošević. With it he lays the ghost not only of the old theories of Danubian influence in Greece, but also of the whole cult of the "Indo-Germanizing" of Greece. This he discards completely and the first significant southward movement he sees is that of the "Minyans" into Greece, coming possibly from Serbia down through Thessaly, thus an intra-Balkan movement like the later "Dorian Invasion."¹⁶ With Heurtley, Milošević holds that the Indo-Europeans came to Macedonia in the Early Bronze Age, probably from Anatolia, and from there made their entrance into Thessaly and the rest of Greece about 2000, as part of the "Minyan" migration. If Milošević's suggestion for the source of the "Minyans" is substantiated by more evidence, he will have performed a great service for Greek prehistorians, a service made possible by his superior knowledge of Balkan prehistory.

This lengthy and detailed analysis of Milošević's chronology has been deemed necessary, since the concise form of the work and the many handy chronological charts of the various regions, as well as the master chart covering the entire area considered, will inevitably bring it wide use. It can by no means be accepted totally, for though much of it is correct, there are fundamental chronological equations which are

wrong, and the entire scheme seems too low at its upper end. Wherever possible I have offered alternative solutions. The usefulness of the very methodically written text is marred by the inconvenient placing of the 1080 footnotes at the end; in highly erudite works such as this volume these essential parts of the argument belong with the text, where they can be referred to quickly and easily. The addition of a few maps showing culture and site distributions, such as those which Milošević has included in a recent article on Serbian prehistory,¹⁷ would have enhanced considerably the usability of the work. There is some carelessness in bibliography, as in the titles of the works on Phaistos and Mochlos, and in footnote references, where often an entire article is noted instead of the specific part which is pertinent to the argument. Unless Milošević has another printing of Welter's *Aigina* than I do, his page references to that work are incorrect. Wherever mentioned, Lasithi is called Lashiti. The term "Ansalunata-Henkel" is tautological.

¹ Albright, *The Archaeology of Palestine* (Penguin 1949) 71.

² *JAOS* 70 (1950) 57.

³ *AJA* 44 (1940) 60-86.

⁴ "Troad" *da Dört Yerleşme Yeri* (Istanbul 1936).

⁵ Schmidt, *Schliemann's Sammlung* No. 8868.

⁶ *Ilios* (New York 1880), p. 416, figs. 502-3.

⁷ *Troy* I 41.

⁸ *The Archaeology of Crete* 43.

⁹ Otto, *Handbuch der Archäologie* II, 1, p. 195, n. 4.

¹⁰ *Troy* I 41.

¹¹ Frankfort, *Cylinder Seals* 227, 232, 301-2.

¹² *AJA* 51 (1947) 171-174.

¹³ *Prehistoric Macedonia* 126.

¹⁴ *Troy* I 263.

¹⁵ *Prehistoric Macedonia* 73.

¹⁶ For this see his very interesting later article in *AA* 63/64 (1948/49) cols. 12-36.

¹⁷ *BSA* 44 (1949) 258 ff.

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Ugaritica II. Nouvelles Études relatives aux Découvertes de Ras Shamra, by Claude F. A. Schaeffer. Mission de Ras Shamra, V (Institut Français d'Archéologie de Beyrouth, Bibliothèque Archéologique et Historique, XLVII). Pp. xv + 320, figs. 131, pls. 45. Paris, Librairie Orientaliste Paul Geuthner, 1949. 3000 Fr.

This is the second volume of studies of material from Ras Shamra, and contains essays on the gold bowl and patera found in 1933, on the "wearers of torques," and on the large stela of a weather god. The volume contains also a corpus of pottery from the upper levels of the site.

The two gold vessels, probably ritual utensils from the Baal temple, have become justly celebrated in recent years, and are the most important pieces of Syrian gold work known. That they are of Syrian manufacture seems sure; the author has stated in detail the composite nature of the themes employed in the relief decoration, with elements borrowed from various countries, and the local quality of the style. He believes that the scenes are all to be interpreted in terms of Ugaritic myths. However, it must not be forgotten that ancient Near Eastern artists habitually copied well known motifs without any apparent non-artistic reason; this is often visible in the cylinder seals of Syria, where Babylonian motifs which are parts of well defined scenes in their homeland may be juxtaposed without other than decorative meaning.

The following observations on the decoration of the bowl seem in order: (1) The central rosette is not necessarily a solar symbol; it is frequently a vegetation symbol and also appears in purely decorative designs. (See, e.g., H. Frankfort, *Cylinder Seals*, pls. IIIa; vi, where it is definitely a plant held to the muzzles of the animals for food; vig.) (2) The identification of the plant motif as a "sacred tree" seems carried too far; stylized plants appear with animals on works of art of many periods to a far greater extent than is implied by the concept of a "sacred tree" in ancient literature. If one wishes to give a symbolic interpretation, one might say that the plant symbolizes the vegetable kingdom on which the accompanying ruminants are dependent for nourishment. However, a heraldic group of two animals facing a central ornament (plant, human being, or inanimate object) is common as a purely decorative motif. (3) The suggestion that the chevron-engraved band separating the first two registers represents a serpent seems rather far-fetched. (4) The two men fighting the rampant lion are clearly copied from a motif known in several variants in Babylonian cylinder seals. (See Frankfort, pl. xg; the lion, having just attacked a ruminant, is itself attacked by two bull-men, one of whom plunges a dagger in his back while the other aims a weapon at his throat, the exact scene on the Ras Shamra bowl). (5) The spread-winged bird hovering over fighting animals comes also from the Babylonian repertoire, as do the rampant animals with crossed bodies, and the original theme of a carnivore falling upon a ruminant, although the Ras Shamra rendition of the last is based on Egyptian New Kingdom examples, as Schaeffer has demonstrated (Frankfort, pls. IIIB; xvIB, e; xIIIB-d, f-h). The author does not mention the Babylonian analogies even when he admits that some themes can scarcely be explained by Ugaritic mythology. Adaptations of borrowed Egyptian motifs by the local artists are pointed out, and similar adaptations may be seen

in the Babylonian motifs. For example, the men killing the lion are depicted in a peculiar three-quarter view which the Babylonian seal-cutter did not use, the lions leaping upon ruminants are twice shown in the flying gallop of Aegean origin, and in one carnivore-ruminant group the goat (?) is in the semi-kneeling position borrowed from Egypt. (It seems unnecessary to explain this pose, as does Schaeffer, as a tethered animal; the rather awkward pose is a well known convention in Egyptian art: see, e.g. Howard Carter, *The Tomb of Tut-ankh-Amen* III, pl. xxixb). The general scheme of composition with its crowded friezes and numerous filling motifs is not graceful and may be compared with the *horror vacui* seen on contemporary Syrian cylinder seals. Schaeffer's analogy with the interlaced and crowded motifs of tapestry or embroidery is a good one. Bowl and patera are stratigraphically dated to Late Ugarit 2, ca. 1450-1365 B.C., and the stylistic criteria do not in any way contradict this.

The second essay concerns the people who seem to have initiated Schaeffer's Middle Ugarit 1 phase, ca. 2100-1900 B.C. Their arrival coincides with a sudden and vigorous development of metallurgy; associated with them are not only the metal torque, but also the toggle pin, the socketed lancehead, the triangular-bladed dagger with handle ending in a crescent-shaped stone pommel, and the flat axe head pierced with two holes. These newcomers appear before the *floruit* of the Egyptian Middle Kingdom, and the author suggests that they came from the mountainous lands north of the Fertile Crescent, whence they were forced to migrate, probably by impoverishment of the mines, around the end of the third millennium. He believes the migration which brought them into Syria went also into Europe, where very similar types of artifacts are known at the beginning of the Bronze Age.

The last essay concerns the stela of the god identified as Baal with the lightning. The author, believing that it shows strong Egyptian influence, argues that it must come from a period of Egyptian domination at Ras Shamra and now places it in his Middle Ugarit 2. The pose of the god with mace uplifted to strike is rightly compared with that of the Egyptian warrior-king. We cannot, however, concur in the idea that the way of representing the body with head and legs in profile and torso in approximately full view is restricted to Egypt; it is the well known ideoplastic rendering of the human body used, with some variation, all over the Near East in pre-Greek times. The short kilt may have been inspired by that of the Egyptian king but is quite different in detail, and it may be noted that short kilts are often worn by combatants on Babylonian seals. The tresses of hair with curled ends and the dagger-sheath with curled end appear in Hittite art, and Schaeffer is probably

right in suggesting that the Hittites borrowed the motifs from Syria. The tight girdle with curved ends laced together has a parallel in a bronze girdle found in a Middle Bronze II B-C grave at Tell el-Far'ah in Palestine (*R Bibl* [July 1947] pl. xx, 9). The tiny figure beside the god is uncertain, but Schaeffer recalls the small figures of Egyptian kings protected by their gods, and the same feature is seen in the Hittite reliefs of Yasilikaya. The crown with spiked top and projecting horns is completely un-Egyptian. Schaeffer believes the horns emblematic of the connection of Baal with the bull; he makes no mention of the fact that one or more pairs of horns on a crown are the usual Mesopotamian emblem of divinity in general. The spiked crown itself is similar to that frequently worn by Assyrian kings (e.g., Frankfort, pl. xxxiii); and a similar horned crown is seen in the round on an ivory figurine from Nuzi (cf. R. F. S. Starr, *Nuzi* II, pl. 101). Such crowns are known on cylinder seals of Frankfort's Second and Third Syrian styles; one from Ras Shamra itself (Frankfort, pl. xlvd) shows a warlike deity almost identical with that on the stela, and similar depictions are found on other seals. For example, Ward, *Seal Cylinders of Western Asia*, no. 913 shows a deity in short kilt, spiked crown without horns, long lock of hair with curled end, dagger with curved end, upraised mace, and left hand holding what is apparently the halter of a bull who crouches at his feet; he stands on mountains which are depicted in the usual Mesopotamian wavy or scale-like pattern. Since the pose on mountains is commonly associated with weather-gods, it is probable that the wavy lines beneath the feet of Baal on the stela are to be understood as a convention for mountains.

As to the date of the stela, the reviewer is inclined to think that Mr. Schaeffer's previous date of 1600-1100 B.C. is more nearly correct than his present one of 1900-1750, his Middle Ugarit 2. The circumstances of finding are equivocal, and the new date is based on style alone, founded on his belief in the strong Egyptian character of the piece. The best dated parallel is the Tell el-Far'ah girdle which, according to the accepted Palestinian chronology, is ca. 1750-1500 B.C. (The full presentation of the Ras Shamra pottery strengthens the reviewer's previously expressed conviction, *JAOS* 70 [1950] 52, that Schaeffer's dating of Middle Ugarit is incorrect. Middle Ugarit 2 is unequivocally related to the latter parts of Middle Bronze II in Palestine, and is ca. 1750-1500 rather than 1900-1750. For a concurring opinion, see M. Dunand, "Stratigraphie et chronologie des sites archéologiques du Proche-Orient," *RA* 36 [1950] 5-39.) Frankfort's Second Syrian style of cylinder seals, which is post-First Dynasty of Babylon, must begin at the earliest around 1600 B.C.; and the Third Syrian style, to which the Ras Shamra seal cited above is at-

tributed, is late second millennium, probably not long before 1200. These factors suggest that the Baal stela belongs to the end of the Middle Bronze Age, or to the Late Bronze Age, perhaps the sixteenth century.

The major part of the book is devoted to the presentation of a corpus of pottery which in scope and format may well be taken as a model. It comprises the pottery of level I, much of level II, and some vases from late level III. Presentation is chiefly by loci, of which the tomb groups are especially valuable; at the end of the section all of the better known individual types (Mycenaean painted ware, dipper jugs, bichrome painted ware, etc.) are grouped together regardless of locus. This double presentation is an invaluable aid to the reader. Illustration is chiefly by line drawings, which are excellent and of a size sufficient to allow observation of all details. The accompanying catalogue is also excellent, giving succinctly all necessary information as to appearance and findspot of each piece. Mr. Schaeffer has the excavator's knowledge of the type of information which other archaeologists need and has accordingly presented it in convenient form. The compilation of such a pottery corpus can scarcely be too highly praised.

Ugaritica II is a most welcome addition to the archaeological literature of Syria. It may be hoped that others who have excavated in that country will follow this example in speedy publication of the materials of the important Middle and Late Bronze Ages.

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The Painted Pottery of the Near East in the Second Millennium B.C. and its Chronological Background, by *Marian Welker*. Transactions of the American Philosophical Society, N.S., vol. 38, pt. 2, pp. 187-246. Pp. 59, pls. 7. Philadelphia, American Philosophical Society, 1948. \$1.00.

The purpose of this monograph is "to analyze the painted wares which appeared in the Khabur region and in the Syrian coastal area between ca. 2000 and 1200 B.C. and to fit them into their chronological background." No purpose could be worthier: a well-illustrated monograph on this subject should be greeted with rejoicing by all Near Eastern archaeologists, provided that it is clearly arranged and easy to use. Miss Welker's study fails to meet this requirement. From the first sentence to the last the writing is of super-Laconic condensation and super-Heraclitean obscurity; and the system of references, while economical of print, is superlatively wasteful of the reader's time. Perhaps this code can be broken and made to yield some information, if one lines up all the books and articles listed in a bibliography of 152 items; I do not think a reader should be expected to do that.

The monograph is illustrated with over three hundred fine drawings by the author which are, however, very strongly reduced in the reproductions. These illustrations are arranged "according to their relationship and typological sequence rather than their exact chronological order." There are no captions and no list of illustrations. The reader must hunt for the object that may be of interest to him in the Catalogue of Forms (222-228). If his eyesight holds out, he will find there the place where the object came from and some intricate cross references to the original publication. Despite all these obstacles, the Catalogue will have to be used by students of Near Eastern pottery, for it presents an important attempt to classify Near Eastern wares (Khabur Ware; Black and Grey Ware; Miniature Ware; Syrian Burnished; Caliciform; "Transitional and Proto-Hyksos"; Forms of the Hyksos Period; Third Dynasty of Ur, Hammurabi, and Kassite Forms; Mitanni Ware; Late Middle Bronze and Late Bronze Painted Wares in Palestine). It also contains useful entries on metal objects and on decorative motifs.

The author's troubles stem from her attempt to solve chronological and ethnic problems as well as questions of influence within the framework of a detailed typological and stratigraphic study. Had she given in each chapter first a clear survey of the techniques, shapes and ornaments, then her comparisons, and finally her conclusions, the study would have been much more intelligible than it is now. As it is, the text has to be read with great care, practically word by word, and the author's conclusions must be elicited from cryptic and involved statements, which sometimes appear in most unexpected places. If I understand Miss Welker correctly, she believes that the painted wares were carried forth from Iran and Kurdistan into Cilicia and Syria by pre-Hyksos and Hyksos tribes (209 f.); Cappadocian painted wares of Asia Minor are also mentioned in this context. In another passage, the painted wares of Syria and Mesopotamia are said somewhat more cautiously (218 f.) to be two offshoots from some region from which they spread "with diverging branches of migrating races." The Khabur—"Mitanni" wares are, in Miss Welker's opinion, originally North Mesopotamian rather than Syrian. In principle, Syria and North Mesopotamia are two different provinces of painted wares, separated approximately by the Euphrates. Direct influence of North Mesopotamian painted wares upon those of Syria is intermittent and secondary (as in the westward spread of the Khabur-Mitanni ware).

Miss Welker's chronological conclusions illustrate the danger of typological investigation which is based on isolated objects or isolated traits of pottery. By bringing down the dates of Jedeideh XI and Hama J

and K and by jumping from one vase to another in the long sequence of pottery from the Hypogeum at Tell Ahmar, she manages to equate the "Khirbet Kerak Phase" in Syria (normally considered Early Bronze 2, presumably not later than 2500-2400 B.C.) with Chagar Bazar 2, which must be dated by the Third Dynasty of Ur (2070-1960 B.C., Albright). Then, on the basis of alleged resemblance of vase shapes from Megiddo Level XVIII (Wright, 3200-2800 B.C.; Albright, 2900-2600 B.C.) and Beisan Level XIV with those of Hama J, she arrives at the astounding conclusion that the earliest levels of Palestinian sites are contemporary with the Isin-Larsa and the Hammurabi periods in Mesopotamia (Hammurabi, 1728-1686, Albright). The inevitable happens: the First to Third Dynasties of Egypt must be dated in the early second millennium B.C. They are actually so placed in Miss Welker's Chronological Table 3. Such a discovery would stagger a lesser person, but Miss Welker disposes of the matter with the rather enigmatic remark that "the dating of Megiddo XVIII would seem to make the Egyptian dating impossibly low, but we have seen that painted ware, which marks the Middle Bronze phase in Palestine, appears at Byblos during or shortly after the Sixth Dynasty, intruding into the caliciform phase as at more northerly Syrian sites".

The author's industry, first-hand knowledge of objects, and power of observation will cause archaeologists to seek and respect her opinion on individual wares, vase shapes, and ornaments (see, for example, the remarks on scale pattern, spiral, volute tree, and guilloche, 214 ff.). There is the Catalogue and a careful Index to help them in such quest; but it will be uphill work.

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Thespis: Ritual, Myth and Drama in the Ancient Near East, by *Theodore H. Gaster*. Pp. xv + 498. New York; Henry Schuman, 1950. \$8.50.

The relation of ritual to various forms of early literature has been frequently discussed in the last years. Partisans of this approach to literature have often overstated their case so that the student of comparative literature and folklore has come to be careful about too readily accepting every claim of ritualistic origin.

That some absurdities have been written on this matter should not prevent the very monumental treatise of Dr. Gaster from receiving most careful reading and consideration. There is little doubt that much of the material which he ascribes to ritualistic origins does have very close resemblances to the rituals he discusses.

He begins with a very definite theory as to the components of drama, finding in drama a combination of ritual and myth. The particular rituals he is interested in are those concerned with the seasons of the year. He finds widespread the practice of performing rituals at various critical seasons of the year. These seasons may differ somewhat from people to people but he finds that they regularly include five or six specific elements which are common over the world. These elements he lists as rituals of Mortification, Purgation, Invigoration and Jubilation and he finds that there are various subsidiary elements such as the return from the dead and ceremonies involving the King. He gives ample illustration of these rituals in the Near East and cites examples from various parts of the world. Further along in his book, he discusses the way in which these rituals are carried over into myth and then in some detail the way in which the combination of myth and ritual goes over into literature.

The second part of his book consists of a translation and discussion of certain dramatic texts from the Near East. Many of these are very difficult of access and a particular value of the book is the fact that these texts are made easily available. Of these texts there are three Canaanite, four Hittite, two Egyptian, thirteen Hebrew and two Greek. In addition there is the text of a Mummer's Play from England.

The work is well indexed both with an alphabetical and a motif index. The bibliography is extremely valuable to all students of comparative literature.

So far as the texts from the Near East which the author has cited are concerned, the case of the relationship of ancient ritual to literary production seems well established. The citation however of parallels from primitive peoples in various parts of the world without any historical connection to the Near East depends upon a method which is dangerous in ethnological studies and which may well lead to unwarranted conclusions. There are, after all, only a limited number of ritualistic acts likely to be found anywhere, so that it is not remarkable that examples of any particular ritual should be found in the uttermost parts of the world. The case with ritual is entirely different from that of a highly complex myth or tale found in widely separate places because the ritualistic acts do not usually have great complexity. Their independent development therefore may well be expected so long as they are relatively simple.

The citation of these parallels from afar are really not a necessary part of Dr. Gaster's argument and they do not vitiate the essential value of his important work.

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Early Khartoum: An Account of the Excavation of an Early Occupation Site Carried out by the Sudan Government Antiquities Service in 1944-45, by A. J. Arkell. (Published for the Sudan Government). Pp. xvi + 145, pls. 113. Oxford University Press, 1949. £5 5s. 0d.

In this book Arkell gives a full report of the excavation of a low mound in the center of Khartoum. His work there has initiated an important field of research, that concerned with the prehistoric cultures of the Sudan. In addition, the importance of Arkell's discoveries transcends the field of Sudan archaeology for they possess significant implications for the reconstruction of early cultural development in Egypt and northern Africa.

The essential features of the Khartoum site may be summarized as follows. It had been much disturbed by burials made during the last century and by wind erosion. A grey sand deposit, one to two meters deep, with artifacts formed the top of the mound; below came layers without traces of human presence. Pains-taking excavation revealed that the site was unstratified. There were no architectural remains, not even traces of hearths or post holes. Fragments, however, of burnt clay with the imprints of reeds and rope come from wattle and daub shelters. Arkell interprets a few small deposits of salt formed around dense masses of objects as the sites of habitations. Associated with this early settlement were parts of seventeen skeletons; the least destroyed examples showed that the bodies had been buried in a tightly contracted position. The only objects found with them were a necklace of ostrich egg-shell beads and a sherd used as a pillow, but Arkell points out that the graves were too disturbed to indicate whether it was customary to bury objects with the dead.

In addition to the archaeological material, the other possible sources of information have been fully utilized—the geology of the site, the human remains, which are discussed by Dr. D. E. Derry, and the fauna, reported on in detail by Miss Dorothea M. A. Bate. All the evidence combined shows that the Khartoum site was originally a sand bank beside the Blue Nile, occupied, perhaps only sporadically, by a people of negroid type. They lived at a time when the flood stage of the Nile was about four meters higher than at present. Masses of bones of fish and game, contrasted with the absence of any traces of domesticated animals or cultivated plants, indicate that the Khartoum people still lived by food gathering.

However, this people already had some well-developed crafts. Pottery was in common use. The large numbers of sherds all belong to essentially the same fabric, a hard ware varying in color from bright red through brown to black. Sometimes a red, brown, or

cream slip was added. Arkell divides the sherds according to their varying types of incised and imprinted decoration. Most common was the Wavy Line pottery decorated by means of combing with cat fish spines, many ancient examples of which occurred at the site. In addition there was a Dotted Wavy Line ware combining lines and impressed dots, a rather rare cord-impressed ware, and other less common classes. Though the incised decorations are clear and striking, there was hardly any real pattern-making. Unfortunately, no complete forms could be reconstructed; the majority of the vessels were rounded bowls with the most careful decoration near the rim. In addition, there were some irregularly pointed bases in plain ware, built up by coil technique, and a few slightly carinated sherds of a micaceous ware.

The stone industry was mainly microlithic, including lunates, points of various types, borers, and rather rare transverse arrowheads. Stone rings were perhaps used as maces and grooved stones as net sinkers. On the basis of red and yellow ochre stains Arkell interprets pebble and disk grinders as used for preparing cosmetics rather than for grinding grain. Among the bone implements the most outstanding are a series of harpoons and barbed spear heads.

The first question raised by the discovery of this new culture at Khartoum is that of its age. Although Arkell did not have the advantage of finding it stratified with materials of known age, he cites a number of reasons for assigning the Wavy Line Culture to the Mesolithic period, that is to a stage intermediate both in time and cultural development between the Upper Palaeolithic cultures and the fully-developed agricultural villages of the Neolithic and Chalcolithic periods. In the first place the climate at the time of the Khartoum settlement was wetter than at present, providing a suitable habitat for moisture-loving organisms—an edible hackberry, certain land snails, a swamp-dwelling antelope and an extinct reed rat. The latter is more closely related to fossil forms from the Sahara than to species now living in moist areas south and west of the Sudan. This suggests that at the time of the early settlement the climate was still wet enough to provide a favorable habitat stretching between Khartoum west across the Sahara. A second important factor in Arkell's dating of the Wavy Line Culture is its primitive typological character. It yielded no traces of grain or sickle blades. The pottery is more primitive in type than the earliest Egyptian pottery; its shapes are very simple and it was decorated with a simple technique. Some of the stone tools are Upper Palaeolithic in type, resembling elements of North African Capsian, Egyptian Upper Sebilian, and South African Wilton (cf. S. A. Huzayyin, *The Place of Egypt in Prehistory* [Mémoires présentés à l'Institut d'Égypte, 43, 1941] 243-255 and L. S. B.

Leakey, *Stone Age Africa* 68 ff., 105 ff. for summaries and bibliography of these cultures). Finally, there is the evidence given by the discovery of a prehistoric Sudan culture later in date than the Wavy Line Culture. A few red sherds, decorated by alternating impressed dots and excised triangles, from the Khartoum mound are of the same type as others found in various Sudan sites in connection with distinctive gouges. On the basis of typology and distribution Arkell suggested in his book that this "Gouge Culture" was a later development of the Wavy Line Culture. The Gouge Culture is demonstrably prehistoric since two graves containing pottery of the Early Dynastic period were dug into a Gouge Culture deposit at the Omdurman Bridge in Khartoum. Accordingly, Arkell proposed the sequence; Wavy Line Culture—Gouge Culture—Early Dynastic and suggested the term Khartoum Mesolithic for the first of these. Since the publication of his book, Arkell's further work at Esh Shaheinab and the stratified site of El Qoz, has proved the correctness of this sequence. Moreover, in the preliminary reports on his new work, Arkell refers to a variety of features which he thinks connect the Gouge Culture with the Fayum Neolithic and perhaps even with the early pre-dynastic periods of Upper Egypt. On this basis he continues to call the Wavy Line Culture Mesolithic and terms the Gouge Culture the Khartoum Neolithic (*Sudan Notes and Records* 30 [1949] 212–221; *Proceedings of the Prehistoric Society* 1949, 42–49).

This evidence taken as a whole indicates that the Wavy Line Culture is prehistoric, but does not demonstrate without doubt that it is Mesolithic. Thus, the absence of traces of agriculture or the existence of flint types with early affinities do not necessarily indicate a very early, Mesolithic stage. This is shown, for example, in Egypt by the backward Fayum B phase, which succeeded the full Neolithic of Fayum A and by the persistence of a Mesolithic tradition in the Fayum B phase, and in North Africa by the Neolithic of Capsian Tradition, which enshrined early features and yet apparently persisted until a relatively late period (cf. G. Caton-Thompson and E. W. Gardner, *The Desert Fayum*; R. Vaufrey, *L'Art rupestre nord-africain* [Archives de l'Institut de paléontologie humaine, Mémoire 20, 1939]; Huzayyin, *op. cit.* 280 f.). Then there is the complicated problem of climactic change. It now seems established that the Upper Palaeolithic corresponded with an increase in aridity throughout all of Northern Africa which was succeeded by a Neolithic wet phase, as shown by the distribution of Saharan and Fayum cultures, and of the Neolithic of Capsian tradition (Huzayyin, *op. cit.* 107–109, 278 ff.). Thus, the moist climate with which the Wavy Line Culture was contemporary cannot be used as evidence to place it at a period intermediate

between the Upper Palaeolithic and Neolithic periods. This leaves the typological character of the culture, primarily the absence of sickle flints and grain, and its relation to the Gouge Culture as the main bases for making it Mesolithic. Dating by typology may be very deceptive and even though the Wavy Line Culture precedes the Gouge culture, this does not necessarily push it back into a Mesolithic age. For these reasons the reviewer at present hesitates to accept the Khartoum settlement as Mesolithic and also has some reluctance to adopt the term Neolithic for the Gouge Culture if that commits us to an approximate synchronization with the Fayum A culture. One of Arkell's most important links between the Gouge culture and the Fayum, the gouges themselves (*Proceedings of the Prehistoric Society* 1949, 44–45), can hardly be used as evidence for such a correlation, since gouges, although probably present in the A period, are better known from the succeeding B phase (Caton-Thompson, *op. cit.* 20). However, it is premature to debate the chronology of the Gouge Culture before Arkell publishes his detailed description and discussion of Esh Shaheinab, which will doubtless cast further light upon this important question.

The wider implications of Arkell's new discoveries are of great interest. First of all there is the problem of the correlation of the Wavy Line Culture with prehistoric Egypt. This involves the entire question of the early status of Nubia and the Sudan. These regions are usually considered as mere backwaters which received and perpetuated various elements of Egyptian culture (cf. for example Huzayyin, *op. cit.* 287). This view is challenged by Arkell's hypothesis that the Sudan, rather than lagging behind, may have influenced the development of prehistoric Egypt. Although unquestionable, specific links did not occur at Khartoum, Arkell makes some suggestive observations as to possible connections. The Fayum Neolithic possessed barbed bone spears more degenerate in type and consequently, he suggests, younger in time than those at Khartoum. Moreover, Petrie's sequence of harpoons in Upper Egypt shows that the development there was toward a decrease in the number of barbs; thus, the many-barbed Khartoum examples could fall into place as the ancestors of the Egyptian harpoons. Furthermore, Arkell points out that the wavy-line technique of the Khartoum pottery could have been the origin of the typical Badarian technique of rippling and then polishing pottery surfaces. He sums up by pointing out that the ancient Egyptian traditions of their southern origin may contain some truth and that in some manner the earliest Egyptians were influenced by the culture of the racially distinct negroid people of early Khartoum. Before accepting these attractive suggestions as established we need some additional evidence, not only for the exact chronological

position of the Sudan cultures, but also for detailed links between them and prehistoric Egypt. For example, the difference between the Wavy Line and Badarian rippled wares is considerable, despite the theoretical possibility of a relationship. In any case, Arkell's material provides a background for the popularity and long persistence of incised wares in Nubia and the Sudan, and it shows that developments in the south must be taken into account in discussing the problem of Egyptian origins.

Egypt to the north is not the only area with which the Wavy Line Culture may have had connections. The links with western Africa seem, in fact, to be more convincing than those with Egypt. Bone harpoons, bone spear butts, grooved stones, and impressed, incised sherds from Taferjit and Tamaya Mellet (pp. 113, 117 f.; pls. 101, 102) in the southern Sahara display great similarity to features typical for the Khartoum settlement. Here the new Sudan finds open a wide vista. Perhaps, as Arkell suggests, "there was a common fishing and hunting culture spread by a negroid people right across Africa at about the latitude of Khartoum, at a time when the climate was so different that that area was not yet desert . . ." (112). It is true that the Saharan cultures are not yet fully known, their chronological position is not firmly established, and that further study of the correlations between the climate and objects of the different areas is required. Nevertheless, it seems that for the first time we may be getting some tangible evidence for a concept that has seemed somewhat fanciful. Some years ago Frankfort suggested that certain features common to ancient Egyptian and African cultures, and also to some modern African cultures may have ultimately been derived from an old, widespread African cultural phase, a "Hamitic substratum," the common ancestor of various later cultures (cf. *Kingship and the Gods*, pp. 348, note 4, 163-165 for the features in question and the reasons against considering them as transmitted from ancient Egypt to less advanced African cultures). Although some of the most important elements in question, particularly the role played by domesticated cattle, would theoretically belong to a later stage of development than the hunting and fishing economy of the Wavy Line Culture, still the discovery of any features suggesting that in early times related cultures extended from the Nile valley to Western Africa makes Frankfort's hypothesis of a "Hamitic substratum" more plausible.

It is clear that Arkell's work in the Sudan is important, not only for the light shed on the development of that one area, but also for its bearing on some of the major problems of cultural development in Egypt and Western Africa. The fact that the reviewer has suggested that some of Arkell's conclusions need further supporting evidence before they are fully ac-

cepted is by no means a disparagement of his work. The materials presented here are only the first results of his investigations and make us look forward with eagerness to his further publications.

The fine format of the present book deserves high praise, particularly when one remembers the difficult postwar conditions amid which it was produced and the unfortunate tendency for the penurious production of archaeological reports. Especially noteworthy are the numerous halftone plates arranged in groups after the chapters to which they belong. The author and the publishers should be congratulated on having made available this valuable and handsome book.

THE ORIENTAL INSTITUTE HELENE J. KANTOR
UNIVERSITY OF CHICAGO

The Royal Cemeteries of Kush, Volume I: El Kurru,
by Dows Dunham. Pp. xxii + 150, figs. 44, maps 2,
charts 2, pls. 73. Cambridge, Harvard University
Press, 1950. \$25.00.

This is the first of a series of memoirs in which it is proposed to publish the results of the joint excavation by Harvard University and the Boston Museum of Fine Arts of the royal cemeteries of Kush, the district (the author has chosen to use the ancient Egyptian name) comprising that part of the Nile Valley between Khartoum and Wadi Halfa. Six royal cemeteries were discovered at four different sites: el Kurru, which is the most ancient, Nuri, and Barkal, all lying in the region of Napata, the earlier capital of Kush; and Meroë, the later capital, with three cemeteries. The excavations continued for eight consecutive seasons, 1916-1923, and were under the direction of the late Dr. George A. Reisner. When Dr. Reisner's failing health made it necessary to divide the task of publishing his excavations in Egypt and the Sudan, Mr. Dunham, the present Curator of the Department of Egyptian Art at the Boston Museum of Fine Arts, who had assisted him for several years in the Sudanese excavations, was allotted the publication of the southern sites.

Mr. Dunham gives generous acknowledgement to Dr. Reisner for his pioneer work in the excavation of the cemeteries and for his preliminary reports on his discoveries. He also acknowledges his debt to Dr. Miles F. Laming Macadam of Durham, England, for "collaboration in dealing with the complexities of the family relationships of the Napatan royalities, and over the vocalization of their names in 'pronounceable' form." It is to Mr. Dunham himself, however, that our thanks are due for this clear and concise statement of the material discoveries at el Kurru. Interpretative and comparative studies are reserved for subsequent volumes, when the full body of evidence has been presented.

This volume contains only three chapters of text,

The first, general observations, includes short notes on the dating of the generations of Kushite kings, the chronology of the tombs at el Kurru, and the history of the excavation of the royal cemeteries. Chapter II is devoted to el Kurru itself, a general account of the cemetery being followed by a description of individual tombs and the objects found in them, with plans and drawings in the text as well as photographic (collo-type) plates. The chapter ends with a note on the anatomical material. The third chapter deals with the evolution of the Kushite tomb; two ingenious plans emphasize the essential points of this evolution as illustrated at el Kurru.

All together, seventy generations were buried in these cemeteries, twenty-four of them at el Kurru, including five generations of "ancestral forbears." The latter were the chieftains who preceded Kashta, the father of Pi'ankhy who invaded Egypt and founded the XXV Dynasty. Pi'ankhy returned to Kush after his conquest and was buried at el Kurru under a true pyramid of masonry with a smoothly sloping face, presumably inspired by his Egyptian contacts. His successors on the throne of Egypt, Shabako (hitherto known as Shabaka), Shebitku (Shabataka), Taharqa, and Tanewtamani (Tanutamun) were all buried beside him.

We must await later volumes of the series to discover whether or not Mr. Dunham has reached any conclusion as to the origin of the Kushite kingdom and its rulers. Certainly Pi'ankhy seems to have been thoroughly Egyptianized, and on looking through the illustrations of the furnishings of his and his successors' tombs one is struck by their almost entirely Egyptian inspiration.

An interesting sidelight on the well-known passage in the "Pi'ankhy Stela," in which the victorious Kushite describes how he visited the stables of a vanquished Egyptian prince and was enraged at finding the horses starving, is furnished by these excavations. A separate cemetery had been set aside for the chariot horses of Kashta and his successors, and twenty-four horses, along with one dog, were buried in it. Although the human skeletal material from the royal tombs was "disappointingly scanty," Miss Alice Brues of the Peabody Museum, in commenting on that from some intrusive burials of ca. A.D. 300-700, notes certain peculiarities of the leg bones which "might be the result of horseback riding, if this practice was common in the group." It would be entertaining to know if an unusual love of horses was a trait shared by these later inhabitants of Kush and their predecessors of the eighth century B.C.

This volume is a masterpiece of organization and condensation, as much of the material as possible being given in an abbreviated form. An appendix notes the objects from the site now in the Museum of

Fine Arts, Boston. In format, *El Kurru* has set a high standard for the rest of the series and for archaeological publications in general, and special mention should be made of Miss Suzanne Chapman's beautiful drawings and plans.

METROPOLITAN MUSEUM OF ART NORA SCOTT

Jebel Moya, by Frank Addison. Volume I, Text; with a chapter by A. D. Lacaille; pp. xiv + 399, figs. 123. Volume II, Plates; pp. viii, pls. 1 + 116, 1 folding plan in pocket at end. Published for the Trustees of the late Sir Henry Wellcome by the Oxford University Press, London, New York, Toronto, 1949. (=The Wellcome Excavations in the Sudan, Vols. I-II) £6. 6s. 0d.

It is gratifying to note the growing interest shown in the archaeology of the Sudan, or *Kush* as the Egyptians called the lands beyond their southern border. A number of important volumes on this subject have appeared since the end of World War II, and, though mostly dealing with excavations undertaken many years ago, the fact that they are being published is encouraging. They will soon help to establish a more definite picture of a country whose past civilizations have, until recently, been known only to a few interested specialists.

This well written and beautifully designed book deals with the excavations of the late Sir Henry Wellcome who, from 1910 to 1914, uncovered a vast cemetery and the remains of a settlement between the Blue and White Niles, some 150 miles southeast of Khartoum. This undertaking was oddly enough conceived as a means of benefitting the natives by giving them employment. Eventually four thousand men and boys were thus supported, fortunately not all of them in excavation work, and enterprises such as the building of the "House of Boulders" provided charitable jobs for all comers since, as a rule, everyone, whether fit or unfit, who asked for work had to be engaged.

The author, though familiar with the site, had not been present at the excavations, but from field records and diaries and especially from the study of the objects, he has pieced together an admirable report illustrated with excellent drawings and photographs. He presents the picture of a fairly primitive Neolithic people, probably originating in the west, which occupied the site for approximately the last 1000 years before the Christian era. Ornaments, flaked stone implements, tools, weapons, and pottery, both incised and painted, form the main body of the finds. Among the amulets and pottery vessels there are pieces which must have been imported from the north and thus link the Jebel Moya people with the inhabitants of Kush from Gamai to Meroë. On the other hand, habits and customs such as the wearing of lip studs and the extraction of incisor teeth point to the south, and the

author stresses the affinity between the Jebel Moyans and modern tribes of the Southern Sudan. More will be known about this connection when the promised volume on the human remains has appeared in print.

Although this publication does not contain an index, the presentation of the archaeological material is a model of organization, and it is a pleasure to observe throughout the text the extensive use the author has made of earlier reports on Kushite sites.

MUSEUM OF FINE ARTS BERNARD V. BOTHMER
BOSTON

Middle Kingdom Art in Ancient Egypt, 2300-1590 B.C., by Cyril Aldred. Pp. viii + 56, pls. 83, 1 map. London, Alec Tiranti Ltd., 1950. 6 sh.

In 1949 Mr. Cyril Aldred published his admirable inexpensive little handbook, *Old Kingdom Art in Ancient Egypt*, which provides laymen with a reliable and competent survey of Egyptian art during its first blossoming. A year later he has followed this with a second similar volume devoted to Egyptian art of the Middle Kingdom. It fills the same kind of gap as its predecessor. In English there has been no up-to-date, inexpensive book covering the Middle Kingdom phase of Egyptian art, with special emphasis upon sculpture. Despite many obstacles, English publishers seem to be able to produce such a book as this, which sells for less than a dollar. Within its small compass the author has included a map showing the main archaeological sites, an introductory historical survey, an outline of Egyptian history, a bibliography for further reading, first class descriptive notes to the plates, and some eighty-three illustrations. Of the latter, almost a score of the plates represent little known examples which have been photographed especially for this publication, such as the illustrations of objects in Geneva, Brooklyn and Edinburgh (pls. 1, 14, 16, 17, 18, 30, 48, 49, 52, 53, 54, 55, 56, 66, 74, and 75).

With characteristic modesty, the author asserts his alleged reliance upon Evers' art-historical monograph, *Staat aus dem Stein* and upon the late H. E. Winlock's historical study, *The Rise and Fall of the Middle Kingdom in Thebes*. But careful perusal of Mr. Aldred's text and illustrations reveals his own very competent selection and analysis, and a most sensitive and incisive aesthetic judgment. Because the composition and argument are highly condensed, the whole text should be read slowly. With logic, he first discusses the religious background of Middle Kingdom art, explaining the demise of the Sun-cult and its replacement in large measure by that of Osiris. This had marked effects on architecture and sculpture. He next treats the political background and the stylistic differences between the more formal Upper Egyptian (Theban) kingdom and the more naturalistic Lower Egyptian domain. The cessation of pyramid-building

was followed by a new use of art in the political service of the state. Royal statuary served political purposes, as for example, when Senusret III had his own image set up on the Nubian frontier. It is a far cry from this to the careful protective measures taken in the Old Kingdom to keep such figures sealed in a *serdab* or behind temple shrine doors. Turning to the social background of Middle Kingdom art, the author goes over familiar ground: the disillusionment and deep resignation, the loss of *joie de vivre*, the diminution in the prestige of the monarchy, the emergence of a new middle class, and for a time, the creation of a restless feudal group of nobles who later were dispossessed by Senusret III.

All these elements find their reflection in the artistic development. The scanty surviving architectural evidence is lamented. The increasing importance of wall-painting and of the painting on the decorated wooden coffins is cited, as is the rapid evolution in relief sculpture of the Theban School. Some reference to jewelry is included. Special attention is paid to the appearance and rise of the squatting "block" statue, which is unique in not having sprung from a royal archetype. Perhaps Mr. Aldred's best aesthetic observation concerns Middle Kingdom court portraiture at its best. Here, he believes, are portraits conceived and executed at least partially in our sense, since they are embodiments of specific human personalities.

Altogether, for the treatment of Middle Kingdom sculpture, in relief and in the round, this excellent little book should find its way into the hands of a very wide audience. This reviewer holds it in high esteem and looks forward to the publication of the succeeding volume in the same series ("Chapters in Art") on the Art of the New Kingdom.

JAMES H. BREASTED, JR.

PASADENA, CALIFORNIA

Les Premières Civilisations, by P. Jouguet, J. Vandier, G. Contenau, E. Dhorme, A. Aymard, F. Chapouthier, R. Grousset. (*Peuples et Civilisations, Histoire Générale*, edited by L. Halphen and P. Sagnac, vol. I). Pp. xi + 765, maps 4. Presses Universitaires de France, Paris, 1950.

The series "Peuples et Civilisations" traces within a reasonable compass the history of western civilization from the earliest to modern times. This, a new and revised edition of the first volume of the series, is not intended as a work of reference for the specialist in Egyptian, Babylonian, or Greek history, but is designed to present in a single continuous narrative the origin and development of the Oriental and Hellenic civilizations which were to clash in the Persian Wars. The intention of the editors is to revise the various portions of the history from time to time, taking account of new discoveries and changes in historical

opinion. In consequence the history as a whole will always include sections written long before, and others recently written or rewritten. This diversity of origin can be seen within this volume, but with no loss in the unity of treatment of its extensive subject. Within its history of the Near East and Greece down to about 500 B.C. one can almost, by noting where this edition is much revised, trace the fields in which recent scholarship has been most productive.

The chapters on Egyptian history are little changed; the development of Egyptian religion and the origins of predynastic Egypt are the only sections not simply reprinted. For the history of Mesopotamia and Syria the most important change is in chronology. The dates given for Hammurabi in the first edition (2123–2081 B.C.) are now replaced by those of Thureau-Dangin (1848–1806 B.C.), and the remainder of the chronology is adjusted accordingly. Much of the text of the older edition is retained except for the revision of dates. The rewritten sections discuss the earliest inhabitants of Mesopotamia, the earliest Semites, the earliest Assyrians, the civilization of the Indus valley, the political history of Hammurabi and his immediate predecessors, the origins of the Hittites and Mitanni, and the whole history of the Syrian coast and northern Mesopotamia from about 1100 to 500 B.C. Deserving special mention is the excellent new section describing Babylonian civilization on the basis of the law code of Hammurabi.

The entire account of Aegean civilization and of Greek history is changed. The space devoted to these chapters is now doubled and includes almost half the volume. The text here is not merely revised; the whole narrative of the history and description of the civilization is differently conceived. The new organization of these chapters is designed to make clearer the movements of peoples and the course of development of institutions. In this it succeeds admirably.

The auxiliary parts of the text have been brought up to date throughout. There are four maps, which are attractive, yet insufficient to locate many of the places discussed in the text. The chronological tables are fuller than in the first edition. An index has been added. The excellent bibliographical notes at the beginning of each chapter and of each section have been carefully augmented to include the latest works.

YALE UNIVERSITY EMMETT L. BENNETT, JR.

L'Art de l'Asie antérieure dans l'antiquité, by Godefroid Goossens. Pp. 90, pls. 8. Brussels, Collection Lebegue, Office de Publicité, 1948.

This little book forms part of a series corresponding to the Penguin and the Pelican books. Unfortunately, it is not sufficiently illustrated to be of use as a textbook and its value for advanced students is impaired by a peculiar method of reference. The author refers

only to the site or to the museum where a monument is located but gives no references to publications. Were this an ordinary "popular sketch," we could dismiss it as of no further interest. But Goossens' book is a creative and stimulating achievement, a real history of ancient art of the Near East written with an admirable sense of perspective and proportion. By real history of art I mean that the author applies a consistent set of artistic criteria and presents an integrated picture of the development of major arts throughout the area. Such approach is quite different from the medley of priority claims, racial theories, and iconographic studies which so often passes for history of art in this particular field.

To be sure, Goossens' method might be deemed old fashioned by some schools of art historians. He is not afraid to say that something is good or bad, skilful or unskilful. He transfers terminology developed for Western art to his sequence of Near Eastern periods; thus Early Dynastic art is "archaic," Accadian and Babylonian "classic," the Hittite-Mitanni phase "a new archaism," and the Assyrian Empire "a classic Renaissance." He speaks, without definition, of realism, naturalism, and idealism, terms which mean one thing when applied to French art of modern times and something quite different when applied to the arts of the ancient Near East. The questions he asks of his material, however, are simple and pertinent and his generalizations are based on the works of art themselves; unlike Roger Fry, he does not mistake the subjective response of the modern art critic for the manifestation of the artistic spirit of the ancient artist. Although Goossens considers form, composition, space, and rhythm in architecture, sculpture, painting, and minor arts, he is not a pure formalist, for he also discusses historical setting, technical innovations, and iconographic changes and seeks to ascertain which social and religious ideas of each period have found expression in art. Perhaps he overestimates the "Royal" aspect of Near Eastern art and underestimates the impact of religion, but at least he poses the problem of religious influences and makes some interesting suggestions—for example, on the possible connection between the spread of religious "puritanism" and the aversion to human images not only in Palestine and Syria but also in Babylonia and Persia in the first half of the first millennium B.C.

We have competent books on the archaeology of the ancient Near East; we have meritorious contributions to the understanding of special periods and special groups of Near Eastern art; yet we have no up-to-date comprehensive history of Near Eastern art. Those who wish to undertake this fascinating task, will find a reading of Goossens' essay rewarding.

GEORGE M. A. HANFMANN

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Studies in Magical Amulets, chiefly Graeco-Egyptian, by *Campbell Bonner*. (University of Michigan Studies, Humanistic Series, volume XLIX). Pp. xxiv + 334, pls. 25. Ann Arbor, The University of Michigan Press, 1950. \$12.50.

The scope and purpose of this book are best described in the author's own words: "I have avoided using any title that might seem to label this work as a handbook or as a general treatment of ancient magical amulets. . . . Much of my purpose will have been accomplished if the book helps the curators of museums to understand the character and significance of such amulets as fall to their charge, and to present them more effectively to the public."

About a quarter of the book consists of a careful catalogue with excellent illustrations of nearly four hundred amulets, most of them unpublished. The great majority (ca. 300) belong to the collections of Bonner, Newell, Ruthven, Seyrig, and the University of Michigan; the remaining objects come from various public and private collections, especially of the Metropolitan Museum, the British Museum, the Walters Art Gallery, and the late Joseph Brummer.

The main part of the book is an analytical study of the amulets in this catalogue, with references to important specimens published elsewhere or examined by Bonner, but not included in the catalogue. The "partial bibliography" (pp. xix-xxiv) does not contain the references given by Eitrem in the *Oxford Classical Dictionary*, s.v. Amulets.

Bonner is able to combine his vast knowledge of magical papyri with his careful examination of the amulets at his disposal. His main thesis is the assertion, supported by his thorough acquaintance with ancient religion, that the magic amulets have very little to do with any *particular* beliefs of pagan, Oriental, or Christian cults and sects. This assertion which Bonner argues at length and persuasively applies especially to the so-called Gnostic amulets, a class to which most of the objects in Bonner's book belong.

The magic power of the amulet rests in its material (predominantly semi-precious stone), in its inscription, in its symbolic representation, and in the ceremonies which accompanied its manufacture and use. Since very little is known of these ceremonies, our understanding of many amulets is limited, and Bonner has recognized this limitation repeatedly. He has pointed out, moreover, that the other three elements (material, inscription, symbolic representation) occur in such a confusing variety of combinations that it is seldom possible to establish with confidence the particular purpose of any given amulet, assuming, of course, that each amulet had a special meaning. Instead he has presented an analysis of the various

elements of which the inscriptions as well as the representations were composed, and he has thus brought as much order as possible into a highly confused subject matter. Any more systematization would have done violence to the evidence, and would have necessitated lists of exceptions far longer than the lists of specimens of any given type.

The classical archaeologist will be interested to learn that "in some instances the presumption that classical ring stones had a quasi-amuletic value is very strong, . . ." but "that a marked change took place in the first century of the Christian era." Although "Palestinian and Babylonian influences manifest themselves in certain divine names and in the occasional appearance of astrological symbols . . . Egyptian custom, in fact, was the chief formative influence in amulets of the 'Gnostic' type."

The first part of the book deals with "National elements and influences," Egyptian, Jewish, Persian, and Greek. Bonner concludes that Egyptian traditions provided the content, Jewish religion some of the sacred names found in the inscriptions, while Greek art contributed style and form of representation.

The second part of the book deals with the various uses of amulets, as can be determined mainly from the inscriptions: general protection, protection against diseases of the stomach, against fever, against diseases of the eye, against sciatica, against ailments peculiar to the female sex, and against "unseen perils," mainly the evil eye. To this is added a chapter on "aggressive" magic in which the amulets were used less to protect the owner than to harm his known or potential enemies; black magic and love charms are discussed in this connection.

The third part deals with certain more frequent types of representation, and their predominant elements: the snake-legged god with the cock's head (meaning uncertain, but not Gnostic), Harpocrates, Helios, the lion-headed figure, the scarabaeus beetle (all referring to Egyptian solar cults), and various "pantheistic and monstrous forms."

The fourth part deals with the inscriptions: names and epithets, acclamations, liturgical fragments, and the large group of cryptic inscriptions. The latter rely for their magic power either on the sound effect or on the optical effect of series of letters, sometimes arranged as palindromes. Among the meaningful inscriptions Bonner found many additions to our dictionary, but he treats the meaningless texts with great scepticism, reluctant to recognize in them Egyptian or Hebrew words or roots: "where no elements drawn from known languages can be detected in magical names or formulas, we must believe them to have been invented by master magicians."

The final chapter is devoted to "Palestinian, Sy-

rian, and Christian amulets." Bonner is very careful to distinguish here, as throughout his book, between religion and magic, relegating the use of magic and amulets to the spiritually lowest class. The range of the use of amulets in contemporary Christian society may be indicated by two articles in a recent number of *Time* magazine (June 12, 1950). The one concerns the "Miraculous Medal" of St. Catherine Labouré, and the other describes the spiritualist charms sold in the Puerto-Rican Barrio-district of Manhattan. There, in addition to various types of aggressive magic, one also finds the *brujos*, which cure asthma by hanging a tiny dead green frog in a bag around the neck; compare Bonner, p. 2, for similar customs in contemporary Egypt.

This is a book which must be studied from cover to cover in order to be appreciated. The wisdom and knowledge of its author are matched by his common sense and scholarly honesty. Although ostensibly written for museum curators, this book is a most valuable addition to our knowledge of Hellenized Oriental society during the Roman Imperial period, especially in Egypt.

PRINCETON UNIVERSITY A. E. RAUBITSCHER

Sam'al. Studien zur Entdeckung der Ruinenstätte Karatepe. Erste Lieferung, by B. Landsberger. (Veröffentlichungen der Türkischen Historischen Gesellschaft, VII. Serie-Nr. 16). Pp. viii + 117. Ankara, 1948. 880 Krş.

The present monograph was written in 1946, immediately after the appearance of the first preliminary report on the monuments of Karatepe in north-eastern Cilicia, the finds from which bid fair to rank in importance with those of Ras Shamra and Mari in Syria (cf. *AJA* 51 [1947] 199; for the later excavations cf. *AJA* 53 [1949] 63, 394; 54 [1950] 137).

In the preface, written a year and a half later, the author reveals that he would now have expressed himself differently on many details, both on account of the finds subsequently made at Karatepe, and because of his prolonged preoccupation with the subject. He had, however, decided to make no changes in the manuscript, although he does admit as wrong two basic assumptions of his: that Karatepe belonged to the kingdom of Sam'al, the modern site of Zencirli, and that the reliefs of Karatepe could be classed as typical specimens of Late Hittite culture.

All in all the book does, however, make a most valuable contribution to our knowledge of north-western Syria in the Early Iron Age, as the two misconceptions quoted have but little bearing on the bulk of the argumentation presented in this first part of the work.

Landsberger traces, in the main part of the book (12-83), the history of the kingdom of Sam'al from

before the Aramaic conquest to the breakdown of the Assyrian power in 610 B.C., adding a wealth of detailed information about the principal neighboring kingdoms, both from the monuments and from literary sources. The question how far Karatepe can be called Hittite is taken up in the remaining pages, Landsberger analyzing as a necessary preamble the constituting elements of Hittite culture: the historical character of the kingdoms, the languages of their rulers and peoples, the script and their monuments.

While regretting that circumstances prevented Landsberger from completing the work, one cannot but wish that he might soon be able to give a full and up-to-date history of Anatolia and Syria in the Iron Age, a task for which he seems eminently fitted.

YALE UNIVERSITY

HARALD INGHOLT

In Memoriam Halil Edhem, Vol. I (Türk Tarih Kurumu Yayınlarından VII Seri, No. 5). Pp. x + 310, pls. 55. Ankara, 1947.

After the death in November, 1938, of Halil Edhem, formerly Director General of the Museums of Istanbul, his Turkish colleagues decided to bring out a memorial publication in his honor. Two volumes were planned, of which the first—the one here reviewed—was to be devoted to scholarly scientific articles by Turkish and foreign scholars, the second to personal reminiscences.

To foreign colleagues Halil Edhem was always very helpful, and it is but fitting to recall that when the American School of Oriental Research was given a charter in 1900 allowing for the beginning of operations in Jerusalem, it was primarily due to his intercession.

The articles bear witness to his many and active interests in archaeology. One paper by Krauss discusses the inscribed clay cones from ancient Mesopotamia, their shape and development, compares them with the similar so-called foundation figurines, and catalogues the specimens now in the Museum of the Ancient Orient in Istanbul (71-114). The majority of the articles, however, treat Anatolian topics. An excellent summary, with bibliography, of the excavations carried out in Republican Turkey is given by Arik (249-78). Güterbock describes several old and new Hittite monuments examined by him in 1938 and 1939 (59-70), and Bittel gives an account of his visit to Nefesköy, the ancient Tavium, capital of one of the three Galatian tribes. On the western mound Bittel found surface evidence of a settlement, dating at least from the beginning of the third millennium, continuing through the Hittite and Phrygian periods; also interesting pottery from the Hellenistic and Roman times (171-80).

The Parthian art, as we know it from Mesopotamia and Syria is briefly analyzed by Andrae (153-60). A

sculptured head of a young man, in 1938 in a private collection in Berlin, now in the Museum of Ankara, is shown by Sarre to belong to a sarcophagus of the Sidamara type (193-97). Keil adduces new and weighty grounds for identifying the formerly so-called Claudius temple in Ephesus with a temple for Serapis (181-92), and Bosch stresses the unique extent of the autonomous coinage of Anatolia in the Achaemenian and Hellenistic times (161-64).

Buildings from the time of the Seljuks, excavated at Topraktepe, are briefly described by Özgüç (227-33), and representative Ortokid mosques and schools are discussed by Gabriel (211-18). Finally Kühnel attempts to detect the specific Turkish elements in the art of the Islamic world, emphasizing in particular the way in which the stucco is worked at Samarra, the monumental tomb type and the Seljuk rug technique (201-10).

YALE UNIVERSITY

HARALD INGHOLT

Kleinasien und Byzanz: Gesammelte Aufsätze zur Altertumskunde und Kunstgeschichte. Istanbul Forschungen, hrsg. von der Abteilung Istanbul des Archäologischen Institutes des Deutschen Reiches, Bd. 17. Pp. 161, pls. 67. Walter de Gruyter & Co., Berlin, 1950. DM 86.00.

The studies published in this volume were presented in manuscript to Martin Schede on his sixtieth birthday (1943) by friends who had worked in Turkey with him. The printing of the volume was begun in the winter of 1943/4 but was delayed by the circumstances of the war, so that Schede (†1947) did not live to see the collection published. The thirteen articles cover a diversity of subjects, so that the volume will be of interest to a wide circle of scholars.

Walther Andrae ("Die griechischen Säulenordnungen," 1-9) contemplates the "Phänomenosophie" of columns, finding in the three traditional orders mystical and symbolical expressions of the human soul. Kurt Bittel ("Zur ältesten Besiedlungsgeschichte der unteren Kaikos-Ebene," 10-29) reviews the prehistoric finds of the region. Gerda Bruns ("Fragen zum Kopfschmuck kleinasiatisch-jonischer Priesterinnen," 30-34) studies the significance of the peculiar headdress found on several statues (a late antique bust of a lady named Isbardia in the Byzantine Museum in Athens, maidens on the *columnae caelatae* of the archaic temple at Didyma, two priests of the Imperial period from Ephesus, and others).

Armin von Gerkan ("Zum Heiligtum des Apollon Delphinios in Milet," 35-39) presents the results of a small excavation conducted in 1938 in which it was possible to penetrate more deeply than in the previous excavations. Richard Hartmann ("Al Ḥadaṭ al-ḥamrā," 40-50) reviews the history of the fortress (Greek *Ἀδάρα*) which played an important role in the

defence of Anatolia against Arab attacks from Syria and Mesopotamia, and identifies it with modern Saray Köy, between Maraş and Malatya; the historical geography of the region is also studied. Johannes Kollwitz ("Eine spätantike Statuette aus Tyrus," 51-53) studies a torso in the Kaiser Friedrich Museum, found in 1874 and not hitherto well known, which he identifies as a statue of Christ, dating from the 20's of the fifth century. Josef Keil ("Die Inschriften der Agora von Smyrna," 54-68) assembles thirty-six texts in a preliminary survey. The most elaborate article in the volume, by Rudolf Naumann and Selâhattin Kantar ("Die Agora von Smyrna," 69-114), gives a report on the excavations conducted from 1932 to 1941. The report deals with the topography of Smyrna and with the reconstruction and date of the buildings in the agora; a catalogue of sculpture is also published.

Katharina Otto-Dorn studies a mosque ("Die İsa Bey Moschee in Ephesus," 115-131) built in A.D. 1375 which is important as an example of the transition from the Seljuk to the Osmanli architectural style. Gerhard Rodenwaldt ("Stackelbergs Panorama von Konstantinopel," 132-136) publishes and comments upon a drawing of Baron Otto Magnus von Stackelberg made in 1809. Karl Schefold ("Die Tonfriese von Pazarlı," 137-148) discusses the historical significance of the architectural terracottas, with observations on their relations to the material found by the Körte brothers at Gordion. A. M. Schneider ("Regionen und Quartiere in Konstantinopel," 148-158) seeks to determine more precisely than has hitherto been done the boundaries of the fourteen *regiones*, and provides a useful map; this study will also serve as a basis for the investigation of the main elements of the street system of the city. In the final paper, "Zwei oströmische Bildwerke" (159-161), Max Wegner studies the relief of a Victory in the Istanbul Museum, placing it in the period of the foundation of Constantinople, and discusses a striking male portrait head from Ephesus (now in Vienna), which he places in the time of Justinian.

HARVARD UNIVERSITY

G. DOWNEY

DUMBARTON OAKS

La Crète Dédalique. Études sur les origines d'une renaissance, by *Pierre Demargne*. (Bibliothèque des Écoles Françaises d'Athènes et de Rome, Fascicule 164). Pp. 375, figs. 59, pls. 16, 3 maps. E. de Boccard, Paris, 1947.

The present study of Cretan art from the Late Minoan and the Mycenaean period through the Geometric and Archaic periods is of much broader scope than its title indicates. Pierre Demargne's intimate knowledge of Crete and its remains and his field experience gained in excavations there have been

combined with his wide command of the literature on the whole Near East to produce the best analytical study that has yet appeared on Cretan art and its rôle in the Aegean from 1400 to 600 B.C. It is by carefully breaking down Cretan remains into the significant component parts, which are then analyzed and compared with the related Near Eastern and Aegean art forms, that a convincing evaluation of Cretan art has been made. And it is refreshing to find one who does not feel it necessary to fight extreme with extreme, to pit Pancretism against Panionism. Though he has immersed himself in Cretan antiquity, Demargne maintains a scholarly objectivity in judging its influence. He is positive only where he feels the facts support him; elsewhere he has been content with postulating probable and possible relationships and influences, many of which come to the reader as stimulating suggestions of the possibility of future excavation and research in Crete.

The book appeared in 1947, but the bibliography is complete only to 1939, with some additions made to 1946; the post-1939 bibliography, and thus the author's familiarity with new materials, is incomplete. Demargne realized this fault and had to choose between completeness after a long delay and quicker publication with its inherent imperfection. This reviewer feels that he was wise in choosing the latter alternative, for the material which he was not able to control seems largely to support his views and conclusions. Yet the reader would have greater confidence in these conclusions if they were based on a consideration of all the evidence then available.

The study is divided into four parts, the first of which deals with the Mycenaean civilization of Crete. Demargne begins with a historical survey of the "Mycenaean question," considering Mycenaean dates, the hiatus between the Mycenaean and Archaic periods and the striking similarity in the art of these two periods. The conflict between Orientalists and Occidentalists is reviewed, and in concluding this section Demargne shows at once that objectivity and balance which characterizes the whole work. Here he weighs action and re-action, discards extremism and sets the tone for what is to come. The chapter on Mycenaean Crete is a consideration of the geographical, historical and, especially, the archaeological evidence. Geographically at the crossroads of the eastern Mediterranean, historically the seat of a powerful thalassocracy, Minoan Crete had active contacts with all of the Near East as well as with mainland Greece, and its civilization was the foundation on which the Mycenaean koiné was based. From Crete, Mycenaean art received its first orientalizing forms and while it went far beyond Crete in its subsequent widespread contacts with the Near East and in the development of the most orientalizing pre-Hellenic art, the way

had been marked in Crete. For both Crete and Mycenae, Cyprus was the intermediary *par excellence*, the western outpost of Syrian orientalism, the place where Aegean, Asiatic and Egyptian art met as equals and mingled to form the Cypro-Mycenaean koiné. While the contribution of Crete to this mixed art is not yet well defined, Demargne's study of the seals, statuettes, ivories and other small objects of orientalizing form in Mycenaean Crete has defined more closely the nature of the oriental influence in the koiné and has shown that it came chiefly from Syria through Cyprus.

In the second part, the author moves on to the problem of the Geometric Age, when the equilibrium of the Late Bronze Age was upset by extensive migrations in the Aegean. But the Mycenaean koiné was not wiped out by these forces; more and more it is becoming clear that sub-Mycenaean and Protogeometric art are closely bound up with Mycenaean and that the real cleavage comes between Protogeometric and Geometric. The Mycenaean heritage remained in the eastern markets of the old Achaeon world, in Cyprus and on the Syrian coast, and this is where one must seek the real continuity from orientalizing Mycenaean art to orientalizing Archaic art. In Crete the sub-Mycenaean lived on in many places where there was no Geometric, and in the Geometric art too there are Mycenaean survivals which are due largely to the Eteocretans, the indigenous element in Crete. However, Demargne concludes that this pre-Hellenic tradition which lived on was without the force necessary to give birth to a new style, in other words, that archaic orientalism was not the result of transmission through the Eteocretans of Mycenaean orientalism. To him Eteocretan sub-Mycenaean civilization is an end, incapable of revival. What then, he asks, of Geometric art, which seems a sharp break from the sub-Mycenaean and Protogeometric survivals of Mycenaean culture? This too Demargne thinks is eastern. In island Geometric and that of Crete he sees close relationships with Syrian Geometric of the beginning of the first millennium and he believes that this heritage, probably transmitted by Cyprus, made the change from Geometric to Archaic orientalizing art easy and natural. If this theory is substantiated it will revolutionize current beliefs concerning Greece's isolation in the Geometric period.

The third part of the book is given over to a series of comparative studies in which writing is considered first; it is suggested that the diffusion of the Phoenician alphabet followed that of its art, arriving in Greece about 900 B.C. and coming first to Crete, Rhodes and the Cyclades. In the study of architectural orders, the origin of the Ionic capital is placed in the Syro-Phoenician area, the oldest Greek examples being the seventh century one from Arkadés.

For the Doric order Demargne sees no possible oriental origin, but thinks the early Doric of Crete may have been based on Minoan forms. In a long chapter on comparative ceramics the point is again strongly made that Cretan Geometric pottery is in immediate dependence on Cyprus; it is an orientalizing Geometric style and is Mycenaean only through its oriental connections, not as an extension of local Cretan sub-Mycenaean or Protogeometric art. Equally interesting is the long section on comparative ivories, in which these objects are shown to be of first importance as an intermediary between the Orient and the Aegean and especially in spanning the period from Mycenaean to Greek times. Relief bronzes play a similar rôle and are especially important in Crete and in spreading Cretan influence throughout the Aegean. Finally, in sculpture in the round the importance of Crete is best appreciated. Here oriental influence is clear in Crete already in the Geometric period, but in the full flowering of Cretan Daedalism there is more inventiveness and less dependence on the Orient, resulting in the first truly Greek style. The detailed consideration of comparative iconography shows the nature of the connection between Mycenaean and Hellenic Crete, again a repeated orientalizing stemming from the Syro-Phoenician orbit and transmitted largely through Cyprus.

The final section is a consideration of Archaic Crete, beginning with a survey of theories and problems, of the rise of Panionism, to which the author is resolutely opposed, and subsequently of Pancretism to counteract it. The evaluation of the renaissance of Cretan art in the ninth to seventh centuries indicates an activity for which historical texts give no picture to equal that obtained from archaeological evidence. To determine the position of Crete in the archaic world, the author studies it in connection with Cyprus, Rhodes, the Cyclades and Corinth. Cyprus remains the island of continuity and survivals and, through its constant association with Cyprus, Crete partakes of this same character. Rhodes is less steady and submits successively to Cypriote influence, like Crete, then to Daedalism and finally to Ionism. The Cyclades were largely dependent on Crete and received oriental influence chiefly through her. In dealing with Corinth, Demargne indicates that the rôle of Crete was to filter and hellenize the oriental influence coming chiefly through Cyprus and to pass it on to the rest of Greece. This was the channel through which Corinth was orientalized; no part is given to Ionia in this influence, at least not until the development of the full Corinthian style. But here, too, Demargne is conservative and claims for Crete only the suggestion of themes, motives and a style in formation, not the achievement of the extremely fine style of Protocorinthian decoration. In the matter of

vase shapes, Demargne would seem to allow Corinth too little inventiveness—if the aryballos, the skyphos and the kotyle came to Corinth through Crete, the evidence would seem to suggest that they did so already in early Geometric times, not as part of the stream of orientalizing influence.

Finally Demargne asks what happened to end this Cretan renaissance so abruptly about 600 B.C. or a little earlier. Crete became the preserver of old ways, the imitator of those she had taught. Ionic and Egyptian influence now pervaded the Aegean where Daedalism had previously held sway. In groping for an answer, the author hits upon the complete transformation in commercial relations, the fall of the small states before the conquering Assyrians and Babylonians. He is neither convinced nor convincing and adds another possibility: the struggle between Daedalism and Eteocretism which made it impossible for Cretan art to go beyond a certain form of orientalizing archaism. It was the noble but impoverished blood of the Eteocretans in the Daedalic stream which made it both receptive to the second wave of oriental influence in the Archaic period and, at the same time, incapable of adapting itself to new times. That there were two similar waves of orientalizing influence which broke over the Aegean, coming from the same source some hundreds of years apart and producing somewhat similar orientalizing styles, first the Mycenaean and then the Archaic, is one of the facts which Demargne has been most successful in establishing. The link is in Cyprus and the East.

This is the story told clearly, concisely and, on the whole, convincingly in this book. The detailed analysis never obscures the general directions and conclusions. The account could have been aided by fuller illustration, but the fifty-nine drawings in the text are well selected. The sixteen plates are much more satisfactory for giving an idea of the quality and nature of the art objects which constitute the links in the chain of evidence; more such photographs would have been highly desirable and helpful. The typography is pleasing and almost faultless, but the transparency of the paper tends somewhat to spoil both the text and the illustrations in it. The bibliography of 247 items has already been criticized as to content; in form, too, it leaves something to be desired, for many articles are listed without title, but with only the name of the periodical and the date and page reference, a form more satisfactory for footnotes than for a bibliography. These are but mechanical faults.

M. Demargne's great contribution results from the breadth of his knowledge and of his view, which has permitted him to throw off the bias of blind devotion to Pancretism and instead to seek in the wide area of the eastern Mediterranean the cultural similarities which would permit him to see what Crete gave to

the Aegean and the Near East from her cultural heritage, what she inherited in return, and to evaluate her most important rôle as the hellenizer of those orientalizing influences which twice profoundly affected Aegean civilization. By making fewer claims for Crete than her more militant advocates, Demargne has in no way lessened her prestige and her glory, for his claims are substantial.

UNIVERSITY OF MISSOURI SAUL S. WEINBERG

The Swedish Cyprus Expedition, Vol. IV, Part 2; The Cypro-Geometric, Cypro-Archaic, and Cypro-Classical Periods, by Einar Gjerstad. Pp. xl + 543, figs. 60 + lxxi; pls. 18. The Swedish Cyprus Expedition, Stockholm, 1948. Sw. Kr. 200.

The mighty works of the Swedish Cyprus Expedition are well-known to students of Eastern Mediterranean archaeology. Three monumental reports (1934, 1935, 1937) had presented such a wealth of conscientious documentation that some complaints were heard about the difficulty of locating the major results and conclusions. The need for evaluation has now been met in this, the first part of the final volume, written by the distinguished leader of the expedition. Two forthcoming sections will deal with the Stone and Bronze Ages (IV:1) and the Hellenistic and Roman periods (IV:3).

Let it be said at the outset that the book under review is a work of great scholarship and that the author disposes of an incomparable fund of knowledge which embraces not only the Cypriot and the Classical but also the Near Eastern material. The book is not, as one might perhaps surmise from the title, a final report and digest of the Swedish excavations alone; it is an archaeological history of Iron Age Cyprus which includes buildings and objects found in other excavations. The contents of this book are as follows: Architecture; Pottery; Sculpture; Other Arts and Crafts; Relative Chronology; Foreign Relations; Absolute Chronology; Summary and Historical Survey. The first four chapters present the material by types; the same objects and groups of objects are then discussed for their contribution to foreign relations and to chronology. In the final chapter historical data and archaeological evidence are interwoven into a grand picture of the cultural development of Cyprus from the eleventh to the third centuries B.C.

Before we consider the achievement of the author, one criticism of external nature must be made. In some chapters, the text has no cross-references to the illustrations, although abundant references to the earlier volumes of the Swedish Cyprus expedition and to the publications of the Cesnola collection are provided. This neglect is annoying in the chapter on architecture, where, however, the monuments discussed can eventually be identified from the captions;

it is inexcusable in the chapter on sculpture, in which over fifty beautiful photographs illustrate convincingly the grouping made by the author, but the reader is left guessing which of the pieces illustrated are discussed in the text. Similarly, in the general chapters on relative chronology, foreign relations, and history, there are many places where cross-references to illustrations would aid and comfort the reader. Otherwise, the book is carefully planned, beautifully designed, and abundantly illustrated—the modest number of figures and plates is deceptive, as each "figure" contains from five to thirty drawings. There is an excellent index and a comprehensive bibliography.

The book was obviously intended as an exemplar of inductive reasoning: first the evidence is presented, next its import for chronology and foreign relations is shown, and finally its contribution to the cultural history of Cyprus is evaluated. There is nothing wrong with the plan as a plan; yet its execution seems to me to entail certain drawbacks for a book concerned with the archaeological history of a region. Let us take architecture. On pp. 1–47, the reader is treated to a catalogue-like description of sanctuaries and tombs by sites, types, and periods. The text rigorously excludes any explanation of their relevance for the general problems of origins, influences, and derivations, and the reader has to wait until page 427 for the "absolute" dates of the periods. In the meantime he finds under "Foreign Relations" (226–240) modified summaries of Gjerstad's earlier studies on the Palace of Vouni and of Westholm's study on Cypriot tombs, as well as some interesting remarks on possible survivals of an Aegean tradition in the open air sanctuaries of Cypriot Iron Age; he finds there (238), too, Gjerstad's general conclusion that "the Iron Age architecture of Cyprus is thus composed of an 'Eteocyprian' (native) majority and a Greek minority of elements together with a few Egyptian elements in the structural adornment." But it is in the illuminating remarks scattered throughout the final chapter that most of the fascinating problems of architectural history are touched upon: the parallelism and convergence of Mycenaean and "Syrian-Eteocyprian" tomb types in the Cypro-Geometric period (431 f.), the suggestion that Royal palaces must have existed in the Geometric period (445), the rise of monumental architecture in Cypro-Archaic palaces and temples (700–450 B.C.), the persistence of non-monumental structures in religious architecture, and finally the late appearance of structures of substantially Greek character (452 ff., 485 ff.).

All that is valuable but it does not add up to a history of architecture as a cultural and artistic phenomenon in the same way in which, for instance, Aegean architecture was made to reflect the process

of habitation and the development of architectural functions in D. Fimmen's *Kretisch-mykenische Kultur*. It would seem to me that such matters as the location of all known Iron Age habitations sites, the relation of towns, sanctuaries, and cemeteries, and a more comprehensive account of the structural materials and techniques for all kinds of architecture are questions that may be posed legitimately, even if they cannot be answered comprehensively.

Problems arising from the three-fold resumption of the same material in three different chapters of the book appear in a lesser degree in Gjerstad's treatment of pottery and sculpture, subjects to which he makes most valuable contributions. Still, here one might argue that the necessity for separating the descriptive, the stratigraphic, and the comparative aspects would remain regardless of the general arrangement. The great miscellany of objects assembled under the heading of "Other Arts and Crafts" present, however, a different case. Their description amounts to a terse catalogue (130-183) with abundant illustrations but often with no more than a reference to an earlier *SCE* volume for an entry. This catalogue would gain by inclusion of the stratigraphic evidence given on pp. 212-225. As might be expected in the case of arms, jewelry, and similar objects, the fundamental discussion is under "Foreign Relations" (372-420), and that is where one would really like to have the illustrations.

The foregoing remarks may suffice to indicate the drawbacks of the arrangement. My advice to the prospective reader would be to start with the final chapter, then to go to that on absolute chronology, and finally to proceed to what is indubitably one of the most impressive achievements in recent archaeological writing—the masterly survey of foreign relations which must henceforth be used by all interested not only in Cyprus, but also in Greece, Anatolia, Syria, and Palestine in the Iron Age.

Such is the wealth of subjects covered by this volume that but a few matters can be selected to comment upon in this review.

Chronology, absolute and relative: Gjerstad's dates are as follows: Cypro-Geometric I, 1050-950; II, 950-850; III, 850-700; Cypro-Archaic I, 700-600; II, 600-475; Cypro-Classical I, 475-400; II, 400-325 B.C. The initial date is disputed and may conceivably be affected by the results of the excavations at Kourion, Enkomi, and Sinda. One of the arguments for the dating of Cypro-Geometric II is drawn from a Bichrome II bowl found in Megiddo Level V. Gjerstad accepts Crowfoot's date of 960-870 B.C. for Megiddo V, but this is a pretty controversial point to fix upon; Albright and J. H. Young promise elucidation with an upward revision of Gjerstad's chronology, cf. *AJA* 54 (1950) 175, n. 51. Some slight adjustment may

also be necessary in the final date for Cypro-Archaic I which may have been influenced by Åkerström's low dating of Early Corinthian (208, n. 1 and 425).

Architecture: Gjerstad has apparently reserved to the volume of Bronze Age the discussion of the fortified towns of Enkomi, Sinda (C. F. A. Schaeffer, *RA* 31-32 [1949] 930 f.), Kourion, and Idalion, all or some of which would come in their latest phases within the scope of Early Iron Age as defined by Schaeffer, *AJA* 52 (1948) 177. The end of the Bronze Age town at Enkomi is tentatively placed by P. Dikaios at 1100 B.C., while habitation on the Western Acropolis at Idalion (*SCE* II, 462 f., 626 f.) and on the acropolis at Kourion-Bamboula seems to have ended in the eleventh century B.C. The subsequent fate of these sites throws some light on the fate of urban settlements in Cyprus during the "Dark Ages." In Idalion, the Western Acropolis became a sanctuary, while the town apparently grew at its foot. This process recalls the de-secularization of the Acropolis in Athens and is an argument for rather than against continuity of population. At Enkomi, the town was transferred, a change comparable to the changes of sites known from Smyrna, Colophon, and Ephesus in historical times, a measure usually taken for some compelling reason. At Kourion, the situation is not clear. The acropolis at Bamboula was deserted from 1050 (or 1000 B.C., according to J. F. Daniel) until 700 B.C., but it is apparently not known what was happening in the adjacent "outer city" toward Episkopi during that time. Not later than the seventh century, however, the major city of Kourion had been shifted to a place two miles west of the Bamboula site (Univ. of Pennsylvania Museum, *Bulletin* 7 [1939] No. 1, pp. 15 ff., No. 3, pp. 14 ff; 8 [1940] No. 1, pp. 6 ff.). That move would seem to resemble the move at Enkomi, but a good deal more digging needs to be done at Enkomi, Kourion, and Idalion, before any confident view of their urbanistic development can be proposed. This is particularly true of Idalion, where a palace was said to have been located by trial digs at the foot of the Western Acropolis.

Of Iron Age domestic architecture, Gjerstad quotes only one incomplete house plan. Although Iron Age buildings do apparently exist at Kourion and Myrtou (*JHS* 70 [1950] 14), no Iron Age town seems to have been excavated extensively. One must concur in Dikaios' opinion that "investigation of the Geometric, Archaic, and Classical levels of towns such as Salamis, Amathus, and other big centres, may one day revolutionise our knowledge of those periods" (*JHS* 69 [1949] 124).

Sculpture: The descriptive chapter on sculpture (93-129), which excels in stylistic analysis, makes one wish that Gjerstad would eventually produce a separate book on the subject. The treatment of sculpture

under "Foreign Relations" (317-372) contains a survey of Cypriot sculpture found in Egypt, Palestine, Asia Minor, and Greece (with a useful map of sites). Gjerstad makes the reasonable suggestion that the extraordinary numbers of Cypriot figurines found in the Heraeum of Samos, in Rhodes, in Amrit, and in Naukratis may be due to existence of Cypriot trading posts and perhaps to resident Cypriot sculptors. He also surveys briefly the relatively few foreign sculptures found in Cyprus: Assyrian, Egyptian, Syrian, Phoenician, and Greek. Chief among the Greek works is the head known as "Chatsworth Apollo," which Gjerstad has shown to have belonged to a statue of Apollo at Tamassus. It is surprising to find that no more than eight Greek marbles and bronzes (though a number of terracottas) had been imported to Cyprus before the end of the fourth century. I miss, however, the famous Amazon sarcophagus in Vienna; was it considered to be later than 325 B.C.? To the bronzes might be added the fragment of an archaic bronze lion in Istanbul (Aziz Oğan, *Musée des Antiquités Istanbul, Guide Illustré des Bronzes* [1937] 41, no. 77).

Gjerstad takes a sensibly cautious position in the question of Cypriot contributions to the early phase of Greek sculpture; he does claim, however, a definite influence of Cypriot sculpture upon the arts of Sidon, Amrit, Naukratis, Rhodes, and Ionia in the sixth century, especially for the formation of Buschor's "soft style" in Samos. Gjerstad believes that the rise of monumental sculpture in Cyprus which he dates about 650 B.C. was due to impulses from Egypt, reopened to foreigners by the Kings of the Twenty-Sixth Dynasty, and not to influences of Assyria, Syria, or Greece.

An excellent and persuasively illustrated comparison of Syro-Anatolian, Cypriot, and Etruscan sculpture constitutes the section on foreign influences in Cypriot sculpture. Gjerstad points out a number of striking resemblances of sculptural forms, sculptural types, and artistic conventions, as well as parallels of costume and hairdress in support of his contention that Proto-Cypriot, Syro-Anatolian, and early Etruscan sculpture "constitute a clearly distinct group of art different not only from that of Greece and Egypt but also from that of other parts of the Near East" (352). He explains this likeness as due to similar reactions by similar racial groups ("Armenoid") to parallel artistic influences. I am afraid that I cannot subscribe to this explanation. It seems to me that the similarities which Gjerstad discusses are of two kinds. Those of dress and fashion are not surprising in people who live about a day's journey apart as did the "Syro-Anatolians" and the Cypriots. Those of an artistic nature seem to me to be a general characteristic of marginal areas in which more complex forms

of art are barbarized. The "Syro-Anatolians" were thus reducing various forms of Hittite, Mesopotamian, and Phoenician tradition; the recently-discovered sculptures of Kara Tepe present an extraordinary example of this process. The Etruscans were barbarizing some Near Eastern and many Greek models.

As to origins of large-size Cypriot sculpture, I find it rather difficult to believe that the Cypriots should have paid no heed whatever to the abundant works of "Syro-Hittite" and Assyrian sculpture found in the same places where Gjerstad locates his Cypriot trading posts, as in the Antioch Plain. The objection that Syro-Hittite art stopped before 650 B.C. does not apply to provincial Assyrian art found in that region (Tell Tayinat) and at any rate, as E. Akurgal rightly reminds us (*Späthethitische Bildkunst* [Ankara 1949] 144 f.) many Hittite monuments continued to stand there for all to see. It may also be noted that according to M. Mellink, *Bibliotheca Orientalis* 7 (1950) 147 f. the sculptures of Kara Tepe were made in the seventh century.

These are, however, minor points. The great achievement of Gjerstad is to have shown exactly when Cypriot sculpture begins and to have correctly insisted on its somewhat primitive yet essentially independent character. It did not, as he rightly states, influence Greek Daedalic sculpture (340, n. 3); but neither was it substantially influenced by the early triumphs of Greek sculptors. It is becoming increasingly clear that artistic influences are no respectors of geographic logic. The leading schools of Greece were from the start in Crete, in the Cyclades, and on the Greek mainland; they drew their inspiration directly from Egypt, the Late Hittite states in Syria, and the capitals and palaces of Assyria. Daedalus and his students seem to have bypassed places like Cyprus, Rhodes, and the Ionian cities of Asia Minor, where separate and often hybrid schools of sculpture began to evolve.

Pottery is the other field for which Gjerstad's work is of great importance. The initial chapter on pottery (48-90) with its seventy-one plates of fine drawings by Bror Millberg is, unless I am mistaken, the first well-illustrated, detailed account of the modern classification of Cypriot Iron Age pottery. Though frightening to behold, the statistical tables of the frequency of various pottery groups (186-202), or at least those which summarize the overall trends (202-206), will be carefully consulted by excavators in the adjoining areas who will also know how to take archaeological statistics with the famous grain of salt (cf. J. F. Daniel, *AJA* 46 [1942] 287 f.). It is, however, in the long section on pottery included under "Foreign Relations" (240-318) and in some passages of the final chapter (434 f., 438, 446 f., 461 ff.) linking pottery with historical events that the fruits of many years of

research are being harvested. Only a scholar well-acquainted with most of the Near Eastern excavations, and with most of the excavators, could have compiled the formidable array of Cypriot and Cypriot-like pottery from Egypt, Palestine, Syria, and Greece. To this Gjerstad adds a valuable discussion of foreign pottery found in Cyprus, a topic of great interest for the question of the relations of Greece with the Near East (274 ff.). The picture is much the same as that at the sites in Syria, Palestine, and Southern Asia Minor. Cycladic, Rhodian, and Eastern Greek pots are those best represented among the early imports. Proto-Corinthian is scant; but in Cyprus there are a few Attic imports, among them the datable Geometric piece found in Amathus Tomb 13 which Gjerstad places in Cypro-Geometric III B, in the later part of the eighth century (*SCE* II, 81, pl. 141, 1). He seems to date the other Greek imports later, but what he persists in calling "Thessalian Proto-Geometric ware" (actually Cycladic: cf. Kunze, *AM* 60, 227) is quite certainly represented throughout the eighth century in Syria and it would be surprising if it were later in Cyprus (cf. *AJA* 53 [1949] 223, which corrects my earlier statements in *AJA* 52 [1949] 142, 155, n. 32, 91).

Of considerable help for the future ceramic study of the Eastern Mediterranean is Gjerstad's clear statement that a number of so-called "Cypriot" vases found at sites in Palestine, Syria, and Asia Minor are not Cypriot. To explain the matter briefly: in Cyprus, Black-on-Red technique and concentric circle decoration do not really come into vogue until Cypro-Geometric III (about 850 B.C., Gjerstad); but at a number of sites in Palestine and Syria both traits are represented in vases of non-Cypriot material and technique already in the eleventh and the tenth centuries B.C. Gjerstad gives a description of the technical characteristics of this non-Cypriot ware (270, n. 1) and supplies lists of vases to be attributed to this group (242 ff., 247 ff., for Palestine; 259 f., for Cilicia). For Syria, he seems to assume that most of the Cypriot type pottery in Al Mina and the Amuq Plain was made by Cypriot colonists. To his discussion of Cilicia some additions (Kara Tepe: M. Mellink, *Bibliotheca Orientalis* 7 [1950] 143) and amendments might be made. Apart from a few coastal sites, the "Cypriot" pottery of Cilicia is non-Cypriot; it begins as early as Gjerstad's Type I (not II) and probably outweighs the imported Cypriot by more than the four to one ratio suggested by J. F. Daniel.

The origin of the "non-Cypriot Cypriot" wares and of the concentric circle decoration that goes with them is a difficult problem. Gjerstad apparently rejects Woolley's suggestion that it was brought by invading tribes from Asia Minor, or at least he rejects it for Al Mina which he regards as "Cypriot Pure,"

if locally made (255, n. 1). He seems to favor Frankfort's old suggestion that it might have developed in Syria. He does not subscribe to C. N. Johns' idea that the Black-on-Red ware is Phoenician nor does he mention Albright's theory that the Geometric circles decoration is Phoenician (*Studies in Honor of W. G. Leland* [1942] and *AJA* 54 [1950] 173 ff.). Gjerstad does concede that it might have been spread by Phoenician trade (270, n. 1).

The ware under consideration has really three aspects. The general arrangement of decoration on the vase-shapes is in some way derived from Late Mycenaean. The red slip and burnish seems to be endemic in North Syria as well as in Southern and Eastern Anatolia. But the concentric circles are a different story: in Greece we can see how they come out of the Sub-mycenaean via Proto-Geometric; but in the Eastern Mediterranean we cannot trace this evolution (for this reason, I cannot agree with M. Mellink, *loc. cit.*, 149, that this pottery is only a standardization of very late Mycenaean features).

Gjerstad's "Pseudo-Cypriot" wares found in Palestine and Cilicia seem to make use of concentric circles in the eleventh century B.C. It would be tempting to derive this kind of decoration from the painted wares of Southeast Asia Minor formerly called "Phrygian" but now more neutrally "Post-Hittite." Beyond Cappadocia, the next region in which concentric circle ornaments are used is Transcaucasia (early Iron Age pottery, cf. C. F. A. Schaeffer, *Stratigraphie* [1948] 503, fig. 277), a thread that might eventually lead to the European Bronze Age. Yet there are obstacles to this solution. In some cases, the "Post-Hittite" concentric circle wares may be as early as the ninth century B.C. (*AJA* 52 [1948] 150, n. 69), but at stratified sites (Kara Hüyük in Elbistan and Kültepe, excavated by T. and N. Özgüç) the bulk seems to belong to the Middle (ca. 800 B.C.), rather than to the Early Iron Age, later, therefore, than the "Pseudo-Cypriot" wares of Cilicia and Palestine. The use of concentric circles in the "Post-Hittite" painted pottery is more plausibly derived from the influence of the pottery of Cilicia and North Syria (*AJA* 52 [1948] 150 f.), unless one wishes to derive it directly from Submycenaean sources (as K. Bittel, *Grundzüge der Vorgeschichte Kleinasien* [1950] 82).

Gjerstad's final chapter on history opens with a partial treatment of the most controversial problem in the entire ancient history of Cyprus—the arrival of the Greeks. It sounds as if Gjerstad were maintaining his ban on Mycenaean settlements in Cyprus prior to 1200 B.C. He speaks of two invasions in the twelfth century: one predominantly Anatolian intermixed with Syrian and Achaean elements and directed toward Eastern Cyprus, and the other composed of Mycenaeans displaced by the Dorian invasion, and

aimed at Western Cyprus. The latter is apparently thought to account for the eventual Hellenization of the island (428 ff.). The rival theory of the late J. F. Daniel postulates substantial settlements of Mycenaeans on Cyprus already in the fourteenth century B.C. which grew in strength until the breakdown of connections with Greece about 1230 B.C. Only a few small groups of Greek refugees were added after the Dorian invasion and the fall of Mycenae about 1150 B.C. In this view, Hellenization was substantially an accomplishment of the Bronze Age (*AJA* 42 [1938] 261 ff.; 46 [1942] 291 ff.; 52 [1948] 108 f.). C. F. A. Schaeffer speaks of infiltration by Mycenaean merchants from the fifteenth century on (*Stratigraphie* [1948] 328 ff., 382 ff.) and, indeed, seems to assume that the great city wall as well as the First Palace at Enkomi (about 1350 B.C.?) were built by Mycenaeans. He suggests that this palace was destroyed by an invasion of Lycians and Greeks about 1250 B.C. and seems to regard continued control by Mycenaeans during the period of the Second Palace (1250-1100 B.C.) as a strong possibility (cf. *RA* 27 [1947] 129 ff.; 31-32 [1949] = *Mélanges Charles Picard* II, 926 ff.; *ILN*, August 20 and 27, 1949; *AJA* 53 [1949] 372 ff.). J. Stewart, *Handbook to the Nicholson Museum* (Sidney 1948) 156 ff., 164, 171 f., admits Mycenaean trade settlements before 1200 B.C. He accepts the invasions on Gjerstad's schedule, but denies that Anatolians were a major element of an invasion into Eastern Cyprus. Some fairly certain points emerge from this discussion: there must have been some substantial trade settlements of Mycenaeans in Cyprus as at Ugarit; something clearly happened in the later thirteenth century which caused a waning of Mycenaean strength; and there was a curious mixing of Mycenaean and resurgent Oriental elements at such places as Enkomi between 1250 and 1100 B.C. I cannot, however, accept without question the Mycenaean character of the two Palaces at Enkomi and I can see only Syro-Phoenician traits in the remarkable bronze statue of a horned god found in the later (Second) Palace at Enkomi.

Finally, there seems to be a sound core to Gjerstad's attempt to refer Greek legends of heroes roving around Cilicia and Cyprus to the period after the fall of Troy, that is, to the twelfth century. One of the legends has recently received unexpected confirmation. King Asitawandas of Karatepe claims in the newly found Phoenician inscriptions to belong to the house of Mopsus—that remarkable hero who as Mukšūš may have helped to destroy the Hittite Empire (M. Mellink, *loc. cit.* 145, 148 f.). We need not (with R. D. Barnett, *JHS* 70 [1950] 104) claim the inhabitants of Karatepe as "half-Greeks"; but we can certainly believe that Mopsus founded a dynasty

in Cilicia in the wake of the great migration which took place about 1200 B.C.

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Der grosse Fries von Pergamon. Untersuchungen zur Kunstgeschichte und Geschichte Pergamons, by Heinz Kähler. Pp. 202, pls. 71. Gebrüder Mann Verlag, Berlin, 1948. DM 40.

The subtitle indicates that the large frieze of the celebrated altar of Zeus is the center, but not the only object of this book. Dedicated to his older colleagues, Ernst Buschor and Carl Weickert, the author's book grew out of his activity at the Pergamon Museum, where he made intensive studies not only of the sculptures, but also, together with Gerhard Kleiner, of the inscriptions in the epigraphical store-rooms (see p. 181).

Part I, "The Altar and its Great Frieze," begins with the older sanctuary of Athena (built by Philetairos and enlarged by Eumenes II) and the orientation of the altar terrace, the east entrance wall of which is built in such a way that the visitor to the altar saw the Athena temple when entering the propylon of the terrace (see p. 16 f. and Pl. 65). The construction of the altar, the technique of setting it up, and the arrangement of the slabs of the frieze, which were finished before being lifted into place, are carefully described. This is mostly based on the large publication *Altertümer von Pergamon*: II, Bohn, *Das Heiligtum der Athena Polias*; III, 2, Bohn and Schrammen, *Der grosse Altar*, and III, 2, H. Winnefeld, *Die Friesse des grossen Altars*, Kähler, however, makes some original contributions, attempting to fill in the existing gaps and reconstructing the important group of Herakles with his adversary on the east side (pp. 41-43, figs. 11-13). Kähler's intimate knowledge of the frieze allows him to show (in I, chapter 5, pp. 53 ff.) that the leading master must have divided the frieze from the beginning into the portions assigned to the single sculptors and to have ordered the plaques so that their width suited the fighter groups of his original sketch. He believes that the frieze was designed by one great master who had considerable influence, in contrast to W. H. Schuchhardt, who underestimated the influence of the master sculptor: *Die Meister des grossen Frieses von Pergamon* [1925].

Part II, "The Great Frieze as a Work of Art," deals with the historical position, the style of the relief, and the composition of the frieze. Kähler compares the frieze extensively with the art of the late third and early second century, particularly the Gauls of Attalos I, the Pasquino, and the Nike of Samothrace. The latter is rightly dated around 190 B.C. (pp. 76 ff. and pp. 173 ff., n. 75). The pediments of the temple

of Samothrace, however, are given the old date of the early third century, whereas they are now, through the new excavations of Samothrace, dated about 150 B.C. (Lehmann, *AJA* 54 [1950] 129 and *Hesperia* 9 [1951] 5).

The author next characterizes the style of the frieze as a new kind of relief style, which is deeply rooted in the previous period, but has broken away from the old to a new form, by clarifying the former sculptural means of expression. Kähler tries to show how the bodies, drapery, and attributes are all lifted to a monumental greatness which makes the frieze an integral part of an imposing architectural building. The unrest seen in the third century groups is in the frieze dominated by simplification, and adjustment of the parts to the whole. The natural forms and movements have been elevated to an adequate expression of a spiritual movement. The drapery is stylized to reflect the unrest and energy of the wearers and is also heightened to monumental form. The body is master over the drapery, and the action of the body governs the movement of the dress. Yet the drapery is at the same time a counterpart to the body and has its own expressive independence and peculiar, almost decorative, life.

The relief is sculptured almost in the round. Shadows loosen the figures from the background. The bodies are seen in their broadest aspect, but their movement goes parallel to the background. They do not penetrate into it. They fill the space evenly so that there are few gaps left to show the background. Kähler gives an extensive analysis of the contours, movements and density of the figures and of the contrast between the lighted front and the dark shadows between them. The unity of the frieze regarding the relation of the figures to the building, and their relation to each other is stressed despite the difference in the execution of the single groups. Kähler sees in the work of the master sculptor a new artistic will to clarify mighty emotions through the power of obligatory laws and through the readiness to turn back to a "classical pathos" instead of a "classical idealism."

In chapter 3, Kähler discusses the gigantomachy as the best possible subject for a monumental and extensive architectural frieze. The contrast of gods and giants is stronger than in the former representations of the subject. The composition of each side is analyzed (109 ff.). The movement begins regularly at the corners which serve as dividing lines (pl. 64). In the north Nyx, in the east the horses of Hera, and in the south the horses of Helios form central points. Individual figures of the Zeus and Athena groups are taken from the different works of Phidias, but are built up to a new grandiose composition and an original creation. The same is true of other figures

borrowed from older works of the fourth and third centuries (116 ff.). They are adopted for their spiritual attitude, more than for their form which is lifted to a new passionate and monumental grandeur. This is particularly clear in the heads, the differences of which are discussed in style, power of expression, passion, monumentality, spirituality, grandiose and small forms (123 f., pls. 52-63). In the Zeus-Athena group the head of Porphyrios is the center of the composition of this part, which Kähler attributes to the master sculptor himself, while he sees diminishing artistic force in the other sides.

Part III, "The Great Frieze and the History of Pergamon," is based on modern historical works (listed p. 181) and on studies of inscriptions. It leads to a more accurate dating of the altar than the one in the time of Eumenes II (197-159 B.C.) which is generally accepted, disregarding the obsolete arguments of Dörpfeld for the period of Attalos II and the impossible dating of Zschietzschmann in the time of Attalos I (cf. 195, n. 114). While the Temenos of Athena was probably enlarged by the library and surrounded by the colonnade with the reliefs of conquered weapons directly after the battle of Magnesia (190 B.C.), the terrace for the altar was erected later, probably after the victory over the Gauls and Prusias in 186-183 B.C. The small frieze was not finished when Eumenes died, and Attalos III hastily ended the work on the altar, leaving parts of the small frieze and of the architecture unfinished (135 ff.). Thus the large frieze may be dated 182-165, the small frieze 164-158 B.C.

The results of Kähler's careful investigations are not easy to understand for readers who are accustomed to British-American sober and clear style. To give an example of his method of expression (99): "Ihr hat sich der Kopf des Giganten entgegen gewandt, dessen Schrei aus der wie eine Woge sich überstürzenden Kurve des hakenförmigen Flügels hervorbricht." What Kähler probably wants to say is that the curve of the wing repeats the curve of the wide open and shouting mouth (cf. pls. 4 and 57, 2), and to prove how the contour of the figures is enforced by repetition in drapery and accessories.

I do not agree with Kähler when he denies episodes and individuality to the frieze (105). He decidedly misunderstands the Othos-Artemis episode (pls. 7, 24, 30). Othos is numbed by love. Instead of defending himself against Artemis, his arm holding the sword is hanging stiffly down at his side. As other episodes, I should like to name the appearance of Ge, the Mother Earth (pls. 3 and 25) to supplicate Athena for the life of her son Alkyoneus; the contrast of beauty and cruelty in Artemis and Aphrodite (pls. 7, 11, 27, 44); and the dog whose eye is blinded by the boring finger

of the giant whom he is biting (pl. 28). Individuality and variety due to the situation and the art of the leading master, more than ability of the different sculptors, seems to me the reason for the differentiation of heads and for the creation of such original figures as the perfectly human and handsome Othos and Alkyoneus (pls. 3, 29, 33); of the lion giant (pl. 35, 2), the bull giant (pls. 35, 1 and 37, 2) and the bird giant (pls. 4 and 57, 2). The subject matter ought to have received more emphasis than Kähler has granted it.

Even if one has difficulty in the study of this book (simplification of the style would help to express the ideas of the author more clearly), it is a work which everyone should study who is interested in the last great phase of Greek art. The excellent printing of text and plates by the brothers Hartmann in Berlin adds to the value of the book. Even though some, like this reviewer, still prefer the stylistic characterization of the frieze by Arnold von Salis (*Der Altar von Pergamon* [1912]), the book by Kähler has added much to our knowledge and understanding of the "Throne of Satan" at Pergamos (*Revelation* 2.12-13). Every point is well documented in the footnotes (151-196). The Index (197-200) and the list of plates (201-202) add to the usefulness of the book. While most plates repeat well-known parts of the frieze, the details of single figures, parts of drapery, torsos and heads (pls. 20-23, 26-53) invite closer inspection of different artistic forms than is generally the case.

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Excavations at Olynthus: Part XIII: Vases found in 1934 and 1938, by David M. Robinson. (Johns Hopkins University Studies in Archaeology No. 38.) Pp. xix + 463; frontispiece, pls. 267. The Johns Hopkins Press, Baltimore, 1950. \$25.00.

This sizeable book completes the record, begun in volume V, of the pottery from Olynthus. It includes also some fragments from the harbor-town of Micyberna, a series of black-figured skyphoi in various collections illustrated as comparative material, and a few pieces from different places. None of the vases from the city itself conflict with the view that Olynthus was destroyed in 348 B.C.; such notably later pieces as are included come from elsewhere. The general character of the pottery—figured, black-glazed, and coarse—is very like that known from the earlier publication. For the student of Attic and of local wares in the mid-fourth century, this second installment, of over 1100 vases and fragments, now becomes the indispensable companion of the first. The typological discussions of many of the black glazed shapes are intended to cover the material in both volumes, as is also the Introduction and Summary. Neither print nor paper has been spared and the

photographic illustrations, adequate in size, are supplemented by many drawn profiles of vase-shapes. Unfortunately the book has been put together without much regard for the convenience of the student, who will need to use the concordances in volumes VIII and XI as well as here, and who will be harassed by misprints and misunderstandings.

Of the red-figured vases, the handsomest is the Kertch kantharos, No. 54 (pls. 74, 75). The attribution to Schefold's Wedding-March Painter (K. Schefold, *Untersuchungen zu den Kertscher Vasen* [Berlin and Leipzig 1934] 132) is attractive, and establishes this artist as active before 350 B.C. Some dozens of the profiles provided for squat lekythoi might perhaps have been sacrificed in favor of a careful drawing of this unusual piece. A krater-rim fragment, No. 199 B (pl. 117) is a spirited example of the style of about 400 B.C., and recalls the Nereid vase (*Olynthus* V, No. 131; see also here, p. 12). With respect to the "Olynthian" painters and workshops noted, the burden of proof appears to rest with the fabric which, for the finer wares, is nowhere convincingly described or clearly distinguished from Attic.

Special interest attaches to the relief lekythos, No. 82 (pls. 96, 97 and 99; the drawing on pl. 98 and the restoration of the neck and lip must be discounted). By reason of its shape and decorative details this vase should be assigned to a class of relief lekythoi produced by an Athenian workshop active in the mid fourth century (e.g., *Fouilles de Delphes* V, pl. 26 and Schefold *op. cit.* p. 140 and his references). For the figured decoration of the piece, however, the potter-turned-coroplast here apparently looked back to moulds which had their origins some fifty years before his time. Various fifth century associations are noted in the text. Direct comparison with the reliefs on a vase of the last decade of the fifth century is provided by the beautiful oinochoe in the Hermitage (Schefold, *op. cit.* figs. 41, 42), which gives a close parallel for the figure of Philomela (pl. 96 at left) on the Olynthus vase.

The contents of the three contemporary multiple graves, Nos. 348, 350 and 364 (*Olynthus* XI 70-71; 72; 75-77) provide material for comparison of the tastes and importing habits of fifth century Olynthians with those of their fourth century descendants. The vases are not illustrated together, as grave groups, but are scattered over twenty and more plates, and their usefulness as evidence is considerably diminished by the fact that five of the vases listed as from these graves are not figured at all. Nonetheless, since the three graves account for a good part of the earlier Attic black glaze found at Olynthus, and since they reflect some special catastrophe, they remain of interest and may perhaps be dated more closely than

the hundred years here covered by the dates assigned to individual pieces would suggest. That of about 400 B.C., given to three of the six local one-handlers may best be counted a simple misprint; the one illustrated piece so dated, No. 688 (pl. 214) is no different from its fellows, Nos. 682 and 683 (pl. 214), called second half of fifth century, and all three are an early version, wholly unlike the later examples of this shape. Most of the black glaze from these graves does in fact belong to the second quarter of the fifth century; the red-figured Nolan amphora, No. 47 (pl. 61), assigned to the Painter of London E 342, suggests a lower limit for the three burials. The single exception to this dating is No. 661 (pls. 212, 213), a two-handled cup (not a kylix; better, bolsal, as Beazley in *BSA* 1940-1945, 18-19, note 2). This piece appears to have strayed into the account of Grave 364 by some accident; it can be no earlier than the closing years of the fifth century and seems wholly out of place in the furnishings of the multiple graves. With this reservation, the vases provide a coherent and substantial group, well paralleled in some of the graves from the North Cemetery at Corinth. From Grave 364 came, moreover, one small object of unusual charm and character. This is the alabaster pyxis, No. 926 (pl. 238). It has been badly served by photographer and engraver alike but appears to be of exquisite workmanship and to merit a fresh presentation with adequate illustration and comment.

An excellent series of Attic black-glazed kantharoi of the first half of the fourth century adds a number of variations on familiar shapes; among the earlier pieces No. 499 (pls. 183 and 185) is especially interesting. This important section has suffered more than its share of misprints and confusions but, even allowing for these, the twelve type-classifications outlined are disappointing. The first two numbered types are in fact not kantharoi at all, but cup-kotylai, in no need of a fresh baptism. The remaining types are not always mutually exclusive, nor are they sufficiently plain and objective to be useful on other sites. To take a single example, the three kantharoi, Nos. 497, 498 and 499 (pls. 183, 184, 185, 187) might well be considered representatives of a single type, in which No. 497 represents the later stage of development.

The attempt to trace the full histories of black glazed shapes in earlier and later material from sites other than Olynthus was perhaps too ambitious an undertaking to be included in the publication of the vases from a single provincial city, however rich its material. The reader who wishes to follow the argument needs much additional illustration, and must have at least a tableful of books on hand. Since, however, the type numbers are not included in the catalogue descriptions and no comprehensive lists are given of the pieces from Olynthus to be assigned to

each type, nor the illustrations arranged in any way to conform to the classification, even the most devoted admirer of Attic Black may be forgiven if he abandons any attempt to understand the system before ever turning to the comparative material. In some classes, as for instance the baby-feeders (pp. 264-268 and pls. 178, 179) the type-studies appear to have been reworked and the original intention lost; clearly so in Type 6, now a catch-all but apparently originally intended to cover feeders of the domed sort, although the good local example, *Olynthus* V, No. 1082 (pl. 193) is not cited. Elsewhere, the emphasis on a single characteristic at the expense of the vase as a whole may be misleading. Thus a locally-made feeder, No. 478 (pl. 178) is assigned an early date on the basis of its proportions, but no account is taken of its flaring foot and uptilted handle, characteristics which might suggest that it is nothing more than a large and inexpensive counterpart of such imported pieces as Nos. 480 and 485, both these from Grave 47 with a palmette lekythos, No. 131 on pl. 106, as late as any from the site (*Olynthus* XI, 11; for the inventory number of 480 read 34-VII-3, as there). On the other hand, the stemmed feeder No. 482, which shows a development well in advance, typologically, of any others from Olynthus is presented without comment, and is listed under Type 6, as if from some notion that the type numbers are arranged chronologically, which is not the case. The difficulties which attend type classification are clearly apparent in this one small class. It is a pity that these elaborate studies did not receive the final revision which might have made them generally useful.

The trials inherent in the preparation for publication of a large number of vases at a distance from the material are of course endless, and it is at the door of this circumstance that we must chiefly lodge our complaints. These should not unduly affect the warm welcome we owe to *Olynthus* XIII. The material essential to a definitive treatment of black-glazed vase-shapes in the fourth century is now available, and the new volume should provide a strong impetus towards this study.

LUCY TALCOTT

AMERICAN SCHOOL OF CLASSICAL STUDIES, ATHENS

Sylloge Numorum Graecorum, Vol. IV, Fitzwilliam Museum: Leake and General Collections, Part II, Sicily-Thrace. Pls. xv-xxxiii. Oxford University Press, 1947.

This section of the *Sylloge* contains representative coins of the greater and lesser Sicilian cities, those of wealthy Syracuse outnumbering the specimens in the Boston Museum by about two to one. The number of bronze coins in the latter museum is, however, very small. After Sicily come Siculo-Punic coins; the

rest of the fascicule includes all of Thrace, the Black Sea District, etc.

In such a rich collection as the Fitzwilliam there are bound to be many coins constituting important varieties. Surprising are the numerous examples of ancient, plated coins of good artistic quality. Noteworthy is an early tetradrachm of Camarina with bearded Heracles head to *right*, of unusual style but not plated, No. 942.

Certain Syracusan tetradrachms here dated after 485, following Boehringer, are of a style which, the reviewer believes, warrants placing them in 510-485. There would otherwise not be enough issues exhibiting a long enough stylistic development to cover the forty-five years of the preceding period, 530-485.

On the reverse of the Syracusan tetradrachm, No. 1246, the *aplaston* held by Nike has not been noted. This coin whose obverse, an original design by the artist, Phrygillos, is a historical issue commemorating by the *aplaston* the naval victory of Syracuse over the Athenian fleet in the harbor in 413 B.C.

An interesting comment on a bronze coin, No. 1615, calls attention to devices on the reverse, which indicate equivalence in value to "1 inflation denarius" and "2 inflation denarii." The reverse employed at Thracian Philippopolis on No. 1766, two river gods beneath three mountain peaks, Mt. Rhodope, recalls the name Trimontium borne by the city. In a full comment on Sestus, No. 1787, we learn that the representation of the Hero and Leander myth was here probably imitated from a painting by Apelles.

The Lysimachus tetradrachms, Nos. 1852-3, conjectured to be "Probably Pergamon" belong to Lampsacus according to Newell's attribution; this would include No. 1854 with almost the same obverse die as 1853. No. 1848 is another posthumous issue besides those noted.

The Maronean and Thasian coins, Nos. 1732-4 and 1823-1833, of debased style nevertheless have a decided interest as showing the youthful Dionysus wearing the divine diadem across the forehead in his own peculiar fashion.

AGNES B. BRETT

Apollo Delphinios, by *Photeine P. Bourboulis*. (Laographia, Deltion tes Ellenikes Laographikes Etaireias, Parartema 5) Pp. 81. Thessalonike 1949.

This monograph on Apollo Delphinios is a dissertation presented to the University of Thessaloniki. The subject is well-chosen, since this aspect of Apollo is curious and problematic. Following a good old-fashioned custom, Miss Bourboulis first lists the ancient sources about Delphinios, quoting relevant passages in full, except for the Homeric Hymn to Apollo which is the bulkiest piece of evidence. (Omitted is the inscription from Nisyros *Eph. Arch.* 1913, 8). A dis-

cussion of modern opinions and an elaborate weighing of them follows. Sometimes the views quoted can hardly be called modern (Welcker's idea that Delphinios is an aspect of the solar god Apollo equivalent to Sol Marinus) and in general the monograph suffers from too timid an approach to the relevant literature. Little space is left for new interpretations, although stress is justly laid on the ancient relations of Theseus and the Delphinios cult, and on the many proofs that the protection of navigation was one of the foremost activities of the god.

The archaeological aspects do not appear in modern garb either. The Berlin Painter's Vatican Hydria is referred to (59) as an anonymous "red-figured vase-painting *Mon. del Inst.* 1, pl. 44" (read 46). The temple at Dreros is not even mentioned as a potential Delphinion. But perhaps one should not overestimate the scope of the pamphlet which has its use as an introduction to a special subject.

BRYN MAWR COLLEGE MACHTELD J. MELLINK

Pheidiasprobleme, by *Ernst Langlotz*. Pp. 119, pls. 32. Vittorio Klostermann, Frankfurt a. M., 1947.

The dragon seeds of dissension concerning the style of Pheidias were sown nearly a century and a half ago by Mr. Payne-Knight and Lord Elgin. Since then they have burgeoned as quarrelsome a company of combatants as ever troubled the Theban plain. Minor skirmishes have been frequent, but the protracted controversy has gradually come to focus upon two main objectives: the relationship of Pheidias to the sculptures of the Parthenon, and date of his great chryselephantine Zeus at Olympia.

In common with most commentators, Langlotz begins his discussion with the first of these major issues. With commendable caution he specifies the lack of positive evidence connecting Pheidias with the glyptic decoration of the Parthenon, only to plunge into the struggle with lusty phrase and disarming argument, and emerge therefrom with the head of a centaur from the tenth metope on the south side which he believes may actually be a portrait executed by the Master himself as a demonstration to his pupils.

The sculptures of the frieze appear to be the product of many hands. The west side he considers certainly by a non-Attic artist; the north and east sections, however, represent the highest achievement of the Pheidias style, and one has only to consider which particular bit most closely approximates his ideal. While these two parts, in tempo "andante," were created by a single designer, the south side seems to have been executed from the most general of directives only, such as "cavalcade of thirty knights." The frieze as a whole demonstrates what differences existed in the works of those "closest to Pheidias."

Like variations appear in the pediment. In trying

to distinguish the possible appearance of the genius of Pheidias among them, a formula is enunciated: that those works which most clearly adhere to the purest Attic classic style will most nearly approximate his creation.

Combat is refused on major issue two, the date of the Olympian Zeus, by the calm observation that the arguments for its being post-Parthenon scarcely need repetition, and with a brief note whose chief contribution is a non-sequitur.

From this point on the discussion branches out into the search for copies of Pheidian originals of sufficient scale to offer a true idea of the master's individual plastic style. The strategy and tactics of Furtwängler appear plainly at this point. The Petworth head best represents the Amazon. Agorakritos has wrongly been credited with the Demeter in the Metröon, because the image antedated the Parthenon. Similarly the Athena Medici type has been dated too late, and should properly be placed before 440 while Pheidias was active in Athens. With somewhat less conviction he deals with the Promachos, Athena Lemnia, Anadoumenos and Aphrodite types, ending with a return to his initial point, the sculptures of the Parthenon.

The argument is consistently and commendably qualified. References to subjective interpretation mingle with the use of the subjunctive and the future of probability. The problems all share the common characteristics of uncertainty and elusiveness, and their interpretation must receive a handicapped entry into the lists. At the end, however, one wonders whether any factual thrusts have been delivered under the flashing swordplay of conjecture. Admission of subjectivity is disarming. It should not, however, make the reader more vulnerable to the hypothetical blade.

AMHERST COLLEGE

CHARLES H. MORGAN

Black-Figure and Red-Figure Greek Pottery, by J. W. Graham. Pp. 5, pls. 11. Royal Ontario Museum of Archaeology, University of Toronto Press, 1950. \$0.50.

The collection of Greek vases in the Royal Ontario Museum at Toronto is the largest of its kind in Canada and among the most representative on the North American continent. This pamphlet is the first in a series of picture books, modelled after the publications of the Metropolitan Museum. Professor Graham has selected seventeen Attic vases and one Campanian neck-amphora. While this booklet will no doubt be useful to the general public, the more serious student will voice two objections: the photographs show no improvement over those used in the extensive catalogue of the collection by D. M. Robinson, C. G. Harcum, and J. H. Iliffe (Toronto 1930), and some of the vases are still as badly restored as when they

first came to Toronto. The vases illustrated in figs. 2B, 4, 5A, 6, 8, and 9A are almost entirely repainted. The lid of the neck-amphora 3A does not belong. It might also be doubted whether the gorgoneion on interiors of black-figured eye-cups should be taken as evidence for "Greek humour" (p. 5).

DIETRICH VON BOTHMER

THE METROPOLITAN MUSEUM OF ART

The Portraits of Alexander the Great, by Margarete Bieber. (Proceedings of the American Philosophical Society, Vol. 93, No. 5, 1949, pp. 373-427.)

In this monograph with its ninety-two illustrations, Professor Bieber presents the results of many years of study of the extant portraits of Alexander. She undertakes especially to correlate the development of the many types with the literary sources, with the growth of the "Alexander myth," and with the changing ideas about the great conqueror in later antiquity.

The study is presented under eight headings: the parents of Alexander and Alexander as crown prince; the conqueror of Europe and Persia (336-330 B.C.); the Great King of Asia; the period of the Diadochi (323-300); the Alexandrian conception of Alexander (third and second centuries B.C.); the Asiatic conception of Alexander (second century B.C.); late Hellenistic and Roman Republican conception (first century B.C.); and conception during the Roman Empire (first to third century after Christ).

Professor Bieber's command of the material is everywhere evident, and it is clear that her assignment of the monuments to the various periods must be seriously considered by all later students of the subject. Some, no doubt, will dissent from her decisions in individual cases, but the broad outline seems to this reviewer securely established. Especially noteworthy contributions are the distinction between the products of the Alexandrian School and the "Asiatic conception," and the study of the influence of classicism and "Hellenistic emotionalism" on the portraits of the Empire.

MUSEUM OF FINE ARTS

GEORGE H. CHASE

Alexander der Grosse, Ingenium und Macht, by Fritz Schachermeyr. Pp. 535, pls. 15, 2 maps. Verlag Anton Pustet, Graz-Salzburg-Wien, 1949. \$1.10.

There have been many Alexanders. Probably there will never be a definitive Alexander. Before the War we had the documentary and statistical Alexander of Berve, the reasonable Alexander of Wilcken, the mythical Alexander of Radet, and the gentlemanly and sporting Alexander of Tarn. Then we had a humanitarian Alexander from our own C. A. Robinson, Jr., together with some additional Alexanders of no other consequence than to indicate the inescapable appeal of the Conqueror. It would seem that there

was nothing new to say about Alexander, no new conception possible. But we should never discount the educational value of a tremendous historical event. Schachermeyr's Alexander is a conception which would have been impossible before Hitler and World War II, and is, in my opinion, the best Alexander thus far. But I hope that our historical sensitivities may be quickened in the future at smaller cost.

The problem of Alexander is more than a purely historical problem. It is, essentially, a psychological one. Usually in Ancient History we are confronted with fragmentary and inadequate sources, from which the most probable story must be reconstructed, or, more rarely, with a single overpowering source from which we vainly struggle to escape: a Thucydides or a Tacitus. The problem of Alexander is comparable, actually, only to the problem of Jesus. In both cases there is ample evidence, each appropriate to the career and importance of the individual. In both cases the evidence is a generation or two later than the events in question (there is a little contemporary evidence in the case of Alexander, of course), and in both cases the evidence is contradictory and tendentious. One's difficulty is to know what to believe.

In the last analysis, this leads to a circular line of argument. Approaching Alexander *de novo*, the historian is confronted with a number of later narratives, all differing among themselves, all drawing in one way or another on earlier accounts which he must reconstruct. Noting that these earlier accounts do not agree, he then develops a theory of the circumstances, background, and point of view of the writer. By this time the personality of Alexander has begun to take form in his imagination. Having decided that one writer wished to present Alexander from one point of view, and another from another, he has then an explanation of the differences of treatment which he has noted—and which themselves have led him to this theory of the authorship—but is still faced by the choice of what to believe. Which source found the truth to his liking and told it, which altered it to fit his taste, which embellished or invented in the attempt to make *his* Alexander convincing? When Callisthenes tells of Alexander's cutting the Gordian knot with his sword, while Aristobulus states merely that he pulled out the yoke-pin, and Ptolemy omits any mention of the incident altogether, how is one to choose? Or is one at liberty to discard all the sources' testimony and to decide that Alexander really untied the knot honestly, according to the rules of the game, because it would have been unlike Alexander to cheat? It is honest to confess that, in the last instance, we make of Alexander what we want or think reasonable.

To Schachermeyr, Alexander is neither what he wants nor thinks reasonable. The events of the last years in Germany showed him that such a "Titan,"

to use the term of which he is most fond, need not be a comfortable or attractive character with whom to spend a quiet evening. He was actually a person of "kriegerische Kraft und Brutalität"; Cassandra was no gentle personality himself, but the recollection of Alexander's anger in later years still made him tremble. Alexander conquered much of the world, might have conquered the rest of it; perhaps he could not conquer only the monsoon rains of India, the blasting heat of Gedrosia, or the summer stews of Babylonia. Perhaps we should not call him, in Tarn's famous phrase, "fortunate in his death," doubting that he would have gone on to some colossal disaster had he lived to attempt his "last plans." He might have conquered the West, though Schachermeyr, who has great respect for Rome, doubts that he would have had lasting success there. But success does not make him admirable. He tolerated no rivalry and no opposition. He began his reign with the massacre of all the male members of his father's house (save, of course, the harmless Arrhidaeus). He killed his most devoted and most deserving followers: Philotas, Parmenion, Clitus, Callisthenes. He was quite prepared to sacrifice the austere and irreproachable Antipater when his usefulness was over. He contemplated extensive exchanges of population, and he felt no compunction in staging mixed marriages for his Macedonians and Greeks on a scale which Schachermeyr compares to cattle breeding. Confronted with such a personality, are we to believe that he exchanged shields with Achilles, but did not drag the valiant Batis living behind his chariot after the stubborn defense of Gaza? Such an individual, whether genius or madman, can not be made amiable even after two thousand years, but he is a convincing son of Philip and Olympias and a fitting teacher for the Successors, who were to fight and betray each other mercilessly for the next half-century.

Alexander was a portent, terrible and more than human to himself and to his contemporaries, even if the half of his success was due to the armament, technical skills, and incomparable fighting qualities of Philip's army.

From the beginning, Alexander felt himself very little Macedonian, and very little attached to Philip. After his return from exile, he received from Aristotle a detached point of view, and regarded Macedonia as peripheral to his world. Philip stood in his way, and while there is no reason to suppose that Alexander had anything to do with the murder of his father—it is apparently impossible that he could have had—it nevertheless did come at precisely the right time. To finance his initial expedition, he sold off his royal estates, purposely loosening his connection with his father's country, and while he thought largely as a Greek, he had no wish to be a Greek hegemon either,

and bound the liberated Ionian cities to himself personally, rather than to the Hellenic League. This desire to free himself from all ties, especially national ones, lay back of the rejection of Darius' offer after Issus (Philip, like Parmenion, would certainly have accepted it), of his pilgrimage to Ammon to get a new father, of his persistent quarrel with the Macedonian nobility, and of his progressive subordination of the Macedonian soldiers from the enrollment of Iranian cavalry in Sogdiana to the creation of an Iranian phalanx and the mutiny at Opis. His rule was to be absolute, and only those who promoted this retained his favor and affection, Hephaestion most of all, and the Greeks: Eumenes, Nearchus, and Medius. His generals must have regarded him with awe mixed with fear and jealousy. Except for the appalling vacuum left by his death, his departure can have been regretted by hardly anyone.

Militarily he was a genius. That is only to state the obvious. Schachermeyr is not a military historian, and the tactics, logistics, and composition of Alexander's army do not receive great emphasis. Nevertheless Schachermeyr has personally visited many of the areas of Alexander's campaigns and battles, and has a surprising number of useful suggestions to make concerning them, and he has brought into sharp focus an aspect of Alexander's strategy which has been little noted. When it served his purpose, Alexander was not at all beyond stealing a victory. He outmaneuvered the Uxians on the way to Persepolis, and he tricked Porus. His early maneuvers in Thrace and Greece showed that he had a natural mastery of the double strategic surprise, that of hitting the enemy from an unexpected direction at an unexpected time. But the three great battles of the Granicus, Issus, and Gaugamela, like the seemingly useless siege and sack of Tyre, were won the hard way, the enemy in each case selecting the battlefield and the battle maneuver. In each case, Alexander won through sheer, brute force, and the impact of the victories was consequently great. Later he was, similarly, to engage the nomad on the steppe and the feudal baron on his mountain crag. No one has known better than Alexander how to exploit the psychology of victory. No conqueror had less need to repeat victories, or was more successful in winning the allegiance of the conquered. He made it clearly hopeless to oppose him.

Alexander was great because of this power. Personally his nature was dual as are all natures, but in him, this Janus quality existed in gigantic proportions: "auf der einen Seite der strahlende Held, bestrickend als Freund seiner Vertrauten, als Anführer der Truppe, als Soldatenvater; auf der anderen Seite der dräuende, zürnende, schreckenverbreitende, düstere König." He could charm as well as terrify. His planning was not only immense, but also beyond any

considerations of logic or knowledge. "Sie zeigte sich primär einfach vom titanischen Triebe und von einem nicht minder titanischen Schöpfervermögen fast blindlings bestimmt. Dieses Paar hetzte den Willen voran und jagte ihn in die Ferne." Schachermeyr credits Alexander with the introduction into the West of the concepts of charity and tolerance, but these, like the related concepts of harmony, peace, and world-brotherhood, are products of the world state and naturally, as Bolkestein has demonstrated, arose in the world states of the Middle East, where the relationship of man to man is equality in subjection to the higher, where subjection is met by kindness. It is not for nothing that the Eastern greeting is "Peace," while the Greeks still say "Rejoice."

Viewed in this light, it becomes clear why the Greek thinkers of the fourth century insisted on the superiority of the Greeks and of Greek culture. It has become popular, almost stereotyped, in the last years to regard their attitude as bigoted and provincial, but sooner or later we must give up our worship of the banal and the undifferentiated. It was Greek culture, working with what Schachermeyr calls the young, vigorous, country energies of the Macedonians, which made possible Alexander's conquest of the East; just as later, it was Greek culture which supplied the good in Hellenism. Perhaps it may have been narrow and selfish of the Greeks to develop that culture which still animates our Western World, but they would never have developed it had Greece been an undifferentiated fraction of a world empire, and the tragedy of Alexander is that, in mingling East and West, he damaged the West more than he aided the East. Hellenism there would have been without Alexander. Greeks and the Greek spirit were becoming not only familiar but more and more dominant in the East before Alexander, and Aristotle preached a warning to his people not to lose in their giving. Alexander's "schöpfungsgeladene Machtgedanken" and his destruction and dislocation, the thousands slaughtered in his battles or condemned to forced residence in strange and remote and unwelcome lands, accelerated the process out of all reason and all control, and let loose on the world a welter of additional wars and disturbances. In all this Alexander was the father of the Hellenistic Age, just as he was also the father of the Roman Empire in more important ways than as the inspiration of Caesar. Viewing the matter in this light, Schachermeyr hopes mightily for our present generation peace and brotherhood, but no more Titans.

So Schachermeyr lifts his treatment of Alexander out of the plane of antiquarianism into that of world history, and gives it not only literary but also philosophical qualities. It will be read for a long time, and will be translated into other languages for a wider

audience Schachermeyr is original and ingenious. He is right to emphasize, I believe, the influence on Alexander's thinking of the great Cyrus, through his teachers and through Xenophon's *Cyropaedia*. It is possible even that Alexander was drawing on Persian models in his reorganization of his army in Bactria. Even in the introduction of heavy infantry, Alexander had the precedent of the *kardakes*. I doubt that the Persians had refrained from further experiments in this direction from fear of the political consequences of arming their peasantry, since Greek mercenaries were better and more convenient. Alexander took over the Persian governmental structure, which remained simple even after Darius. The great revolt of the Bactrians and Sogdians occurred when they feared that Alexander would tighten things up.

On the religious plane, Schachermeyr suggests, very ingeniously, that Alexander's progress can be measured by his choice of ancestral heroes. First came Achilles, a romantic personality but a hero of only the lesser sort. After Gaugamela, it was Heracles, who was both god and hero. With India, it was now Dionysus, god truly, and hero only in the sense that he had once been a human being. This led logically, with the return from the East, to the official promulgation of Alexander's own divinity, a conception which probably had been maturing in his consciousness ever since boyhood. It can not be too strongly emphasized that Alexander was a pagan, and that to a pagan, all things are full of gods. This is no sharp dividing line between natural and supernatural, between human and divine. It was difficult for an Iranian to become pharaoh of Egypt or king of Babylon, since these were pagan concepts. For a Macedonian there was no difficulty. No Greek could feel any real objection to recognizing divinity in someone who was out of the ordinary, provided that he either feared or liked him. Only the Cynics would scoff at the idea in itself, and they denied all divinity. Proskynesis was a humiliating practice, but if Alexander thought that he was a god and wished to be so regarded, even the Spartans said, "Why not?" You believed what you believed, but the notion as such was neither unreasonable nor incredible. To accept it was courteous, and involved no political considerations, as has often been pointed out.

No account of Alexander can fail to be fascinating. In addition to those accomplishments which incline the world to forget the unpleasant side of a conqueror—

"The good that men do lives after them;

The evil is oft interred with their bones"—

Alexander had youth and dash and a mysterious, romantic quality about him. No account of him is altogether wrong, even the most romantic, though I doubt that we should ever credit him with the extreme

views toward life and death and honor, and temperance in love and in wine which are associated with the English gentry. "He lived hard and took his chances," to use Tarn's words again, applied to his generals, who seem to have been, with their smaller capabilities, as tough, proud, and ambitious as Alexander himself. It is Schachermeyr's accomplishment to have brought out the contemporary and brutal features of the Conqueror, features which the charity of time inclines us to forget.

YALE UNIVERSITY

C. BRADFORD WELLES

Aspects of Social Life in Antioch in the Hellenistic-Roman Period, by George Haddad. Pp. v + 196. Diss. University of Chicago, 1949. \$2.50.

Prosopographia Ptolemaica, by W. Peremans and E. Van't Dak. I.L' Administration civile et financière, no. 1 à 1824. Pp. xxvi + 164. Univ. Catholica Lovaniensis, *Studia Hellenistica*, ed. L. Cerfaux and W. Peremans, No. 6. Louvain, 1950.

The fascination exercised on scholars by the elusive but important problem of the population of the ancient world is witnessed by these two new studies, very different in method but alike in aim. The one is by a Syrian, graduate of the Sorbonne and member of the faculty of the University of Damascus, the other by a Flemish scholar already well known for his excellent *Vreemdelingen en Egyptenaren in Vroeg-Ptolemaïsch Egypte* (1937). Both attempt to discover in some part the nature of the population of the Hellenistic East, but the one would assemble the few but enlightening bits of evidence on the great Seleucid capital of Antioch, while the other is working systematically to sift the immense but often obscure materials furnished by the Egyptian papyri.

Both fields are difficult, but the techniques will be demonstrated by the papyrologist. We have come a long way since the Mitteis-Wilcken of 1914, since even the Schubart of 1918. The wealth of the Zenon files could be used by Rostovtzeff in 1922, and it is a tribute to his genius to recognize how far later investigators have succeeded only in confirming his conclusions. Heichelheim in 1925 prepared the way for Peremans with his *Auswärtige Bevölkerung im Ptolemäerreich*. Yet, even with Guéraud's masterly preparation of the *Enteuseis* of the late third and early second centuries, even with the later publications from the rich Ptolemaic site of Tebtunis, the recent publications of Rostovtzeff and of Claire Préaux show how far we are from knowing precisely how many Greeks came to Egypt, and when, and why, and in what capacities.

The situation is much worse, obviously, in the case of Syria and the East, and it might be added, this is particularly true in the case of Antioch, of whose Hellenistic population practically nothing is known.

In Egypt, it is a matter of understanding the papyri, a not-so-simple problem calling for ample information and limitless imagination and critical judgment. With such collections as those of Zenon and of Tebtunis, much of this spade-work has still to be done. In approaching Antioch, it is necessary to check and amplify our meager evidence with the help of all other Syrian and Eastern sites, especially Dura-Europos, concerning which Professor Haddad seems less well informed than a Syrian should be. It is only Dura, actually, of all the Asian Hellenism, which has yielded a substantial prosopography comparable to that which Egypt yields.

We know that Greeks migrated to the East in quantity after Alexander, as they had been migrating in lesser numbers previously. In Egypt, it seems clear that the peak of the movement came under the second Ptolemy, the period of the opening up of the Fayum and of the propaganda. It is clear that Greeks came in every capacity which Greeks can represent, as laborers to clear the fields and as technical experts to run the administration and the Museum. More of them came from Thrace and Asia Minor than from Greece proper. Most of them came without their women, and all of them came to make money and have a better life. Most of them married Egyptian women, and developed into that mixed Graeco-Egyptian society which we see best after some centuries, under Rome. Peremans has shown, and shows again in this new volume (which will be completed by three others now in preparation), that the names serve in general as a guide to nationality (or racial background). At the least, a man with a Greek name wished to pass for one who "knew how to Hellenize," who would speak Greek and pretended to a Greek point of view. At the most, there was enough government control over status as implicit in the name to insure that a Greek name could not be taken purely through personal preference. Similarly, by and large, Egyptian names may be taken as indications of Egyptian status and Egyptian culture. Naturally, by and large, since the Ptolemies were a foreign dynasty ruling in Egypt by virtue of the support of their Friends and of their soldiers, and as Egypt constituted, in the technical language of the chanceries, their *pragmata*, their Friends, their soldiers, and the more specifically administrative and exploitative elements in the country show predominately Greek names. Egyptians occur mainly in posts where a knowledge of the language and customs of the country was essential. These names, so far as they occur in the realms of civil administration and of finance, are assembled in Peremans' book, to the number of 1824.

It may be remarked in passing that the assembling of the names in categories means that a man may occur more than once in different connections, and in

the lack of any general index, the location of someone may take a little time. It may further be pointed out that these lists must constantly be brought up to date, as corrections and additions occur. In our Yale collection, for example, we have a dioecetes Athenodorus about 230 B.C., who may actually prove to be the Ζηνοδῶρου of *P. Teb.* 703.

It is possible that the Greek migration into Syria and the East, under the Seleucids, followed a similar pattern, but many of the conditions were different. The first two Antiochi, particularly, were active founders of cities, but I know of no opening up of new territory in Asia comparable to that of the Fayum in Egypt. If it occurred in Bactria, and accounts for the appearance of the "thousand cities" in our records, we know nothing about it, and Bactria was a long way for a Greek to travel. Certainly the Seleucid administration was largely staffed with Greeks, but the Seleucids, like the Achaemenid Persians and unlike the Ptolemies, had a relatively small bureaucracy. I have the impression that they came as citizen settlers, moving mainly from the older Greek cities of Asia Minor which were under Seleucid control, and that means that they came as burghers, business men, and territorial soldiers, and with their families. They made up the citizen bodies of the cities which had the Greek civic pattern, magistrates, council, and popular assembly, and they got on with whatever temporal authority existed, Seleucid or Arsacid, just as did their mother cities in the West. They formed the citizen body—one will hardly call them the aristocracy—of the poleis all of which included a large number of "natives." Concerning the position of the latter we are never likely to be well informed, but they certainly furnished those elements of the population who did the more laborious and less attractive things. In view of the strict Greek feeling for political and social status, it is unlikely that there was much confusion of the two elements, much Hellenization. I should suppose that this was the situation in Hellenistic Antioch.

Dura has shown one thing clearly. It was Rome which made the difference; the mixing up of things, the Hellenization, came with the Roman conquest. To the Romans, all were "natives," and their background was less important than the uses which they could serve. All knew the more and less desirable arts of civilization, all spoke Greek and could (if required) learn Latin. All were Roman "subjects," and it was indifferent whether they were *politai* or *paroikoi* or just *laoi*. At Dura, as Haddad should note, which was a *ktisma* of Macedonians without any Greek population at all (probably), but which was officially a polis, the social structure maintained itself until the permanent occupation in A.D. 165, after which the older names largely disappeared, Macedonian and Semitic

alike, and were replaced by a mixed Graeco-Syrian "Hellenistic" people, most of whom became Aurelii with the *Constitutio. Mutatis mutandis*, I should expect the same thing to have occurred in Antioch. As most of the Antiochenes whose names are preserved belonged to a late period, it is probably idle to speculate on their ancestry.

In view of the impending publication of a definitive history of Antioch by Downey, the best-informed specialist on the city, it is hardly necessary to comment in detail on Haddad's account, which will certainly perform a useful service until superseded. He sketches in meritorious fashion the accounts of Antioch's founding and the major incidents of its career, and defends its people from the rather sweeping allegations of undesirable qualities which appear here and there in the sources. A good bibliography testifies to the necessity of a knowledge of the Semitic languages on the part of one who will work even in the Hellenistic Period of the Near East.

YALE UNIVERSITY

C. BRADFORD WELLES

Inscriptions Grecques et Latines de la Syrie. Vol. III, pt. 1. Région de l'Amanus. Antioche, by *Louis Jalabert* and *René Mouterde*, S. J. Institut Français d'Archéologie de Beyrouth. Bibliothèque Archéologique et Historique, Vol. XLVI. Pp. 385-527. Librairie Orientaliste Paul Geuthner, Paris, 1950. 2,500 fr.

In the work before us we have the first fascicle of the third volume of a *corpus* of Greek and Latin inscriptions from Syria. The series, begun in 1929, has been capably edited by Professors Jalabert and Mouterde of the University of St. Joseph at Beyrouth.

The inscriptions are arranged geographically, and the present fascicle contains documents from the region of Amanus and from the city of Antioch. Of the 289 inscriptions, 18 are Latin. Eighty-two have not been previously published. More than 100 are epitaphs which are arranged in alphabetical order of the proper names. The conventions for the publication of inscriptions are continued from the two previous volumes (for vol. II, see the review in this *Journal*, 1941, 308). The Greek texts, published in minuscules, are for the most part without accents or punctuation. Restorations and emendations are placed in the commentary.

The document of greatest interest is probably the great Inscription of Octavian (no. 718), containing three of his letters to the people of Rhodus, for which the editors provide a running translation and a lengthy commentary. The majority of the inscriptions from Antioch have appeared in the Princeton publication, *Antioch-on-the-Orontes*. The new inscriptions include an interesting inscribed counterweight, possibly in the form of a votive offering, with values

specified in drachmae, obols and grams, and several epitaphs in verse. The commentaries contain a wealth of learned discussion and felicitous restoration of texts. Professor Mouterde has expressed assurance that the work will be completed, for which he and the now-deceased Professor Jalabert deserve our heartfelt gratitude.

W. KENDRICK PRITCHETT

UNIVERSITY OF CALIFORNIA, BERKELEY

Excavations at Nessana, Volume II: Literary Papyri, by *Lionel Casson* and *Ernest L. Hettich*. Pp. xiv + 175, pls. 8. Princeton University Press, 1950. \$7.50.

This volume presents the Greek and Latin literary documents (*PColt*) found in 1937 by the Colt Archaeological Expedition at 'Auja-el-Hafir, one hundred miles southwest of Jerusalem. Two more volumes are planned, one on the excavations, the other containing the non-literary papyri. The excavations have been described by the excavator, H. Dunscombe Colt, in *CJ* 42 (1947) 314-323 and in *Archaeology* 1 (1948) 84-91.

The documents, described and edited with exemplary care, are (1) a Latin-Greek glossary of the *Aeneid* (saec. VI), more extensive than any heretofore published; (2) fragments of *Aeneid* 2-6 (saec. VI); (3) fragments of the *Gospel of John* (saec. VI-VII); (4) *Gospel of John* 16.29-19.26 (saec. VII-VIII); about nineteen fragments of the Pauline epistles (saec. VII-VIII); (6) part of an early version of the *Acts of St. George* (saec. VII-VIII); (7) an important text of the apocryphal correspondence between Abgar and Christ (saec. VI-VII); (8-9) a private notebook (saec. VII) containing (pp. 1-22) a Greek glossary of difficult words and (pp. 23-30) the *Twelve Chapters on Faith* traditionally (but probably incorrectly) ascribed to Gregory Thaumaturgus; (10-13) brief and unidentified legal and theological fragments (saec. VI-VII), one of which may be from a homily on *Genesis* 4.

Particular interest attaches to the presence, at the end of the *Letter of Christ to Abgar*, of the letters XNMT, which help to settle the controversy over the meaning of the formula XMT. W. K. Prentice believed that these letters stand for some such phrase as *Χριστὸς δὲκ Μαρίας γεννηθεῖς, Χριστὸς Μαρίας γέννα*, or *Χριστὸν Μαρία γεννᾷ*, while F. J. Dölger maintained that they represent *Christ Michael Gabriel*. The *nu* in the Nessana papyrus shows that *Χριστὸν* was meant here. Further evidence has recently been furnished by an inscription in which *Maria* is written in full: R. Mouterde, "A travers l'Apamène," *MUSJ* 28 (1949-1950) 32-33.

The text and the glossary of the *Aeneid* remind us that in the sixth century Latin was still a necessary accomplishment for aspirants to careers in the law, the army, and many positions in the civil service. If

only the text of the *Aeneid* had been found, we might think of some army officer of literary tastes stationed in this remote post. The glossary, however, suggests a local youth preparing himself for a professional career. That the glossary was designed for the use of a student learning the language is indicated by the fact that in books 1 and 2 each word is listed and translated, while in book 4 only selected words are entered; by the time the student had reached book 4 he would be supposed to know a certain number of words. The same is true (as the editors observe) of two of the similar glossaries found in Egypt; in addition to the examples cited by the editors, see C. H. Moore, "Latin Exercises from a Greek Schoolroom," *CP* 19 (1924) 317-328, and H. I. Bell, "An Egyptian Village in the Age of Justinian," *JHS* 64 (1946) p. 26, n. 24, and p. 27.

HARVARD UNIVERSITY
DUMBARTON OAKS

G. DOWNEY

The Monuments of Ancient Rome, by Dorothy M. Robathan, Pp. 211, pls. 19 incl. 2 plans and 1 map. L'Erma di Bretschneider, Rome, 1950. Paper, \$2.00; cloth, \$3.50.

This attractive and useful book I take to be a product of Professor Robathan's hobby, as distinguished from her major interest in Latin palaeography and manuscripts. It is a product also of a good many years spent in Rome (which she knows well and loves) and of giving courses in Roman topography. It is not intended for the specialist, but rather, as the jacket tells us, for courses in Classical Civilization, and supplementary reading for classes in Latin literature, as well as for visitors to Rome. (This information might well have been repeated in a preface, which I miss.)

After a few pages on sources of information, a brief introduction (mostly on building materials), and a chapter on the development of the city, there are eleven more chapters on its various sections, and finally a brief index. The jacket reproduces a fragment of the "Forma Urbis," and there are nineteen plates, including a reconstruction of the Basilica of Maxentius (from an Italian film), a map, and four pairs of ruins and reconstructions facing each other.

It all makes a good introduction to Roman topography, a good guide to the many ruins, and good collateral reading for students. The style is clear, controversial questions are handled well, and some things are excellent—e.g. the description of the Baths of Caracalla (111-4), the explanation of the imperial fora (89-102), and the photographs. We get a much better general idea of the ancient remains than we should from a guide book organized street by street. The only monument I miss is the one to Bibulus at the foot, left, of the Victor Emmanuel monument: this, being epigraphical, interests me specially.

What there is nothing of here is bibliography—no list of books for further study, no references to illustrations of the many wall-paintings mentioned, or of the bust of Ennius (115), or to the inscriptions referred to but not quoted; no mention, I think, of any modern scholars. Two more inadequacies should be mentioned, the map and the index. The latter could easily be completed for a second edition but maps I realize must be a source of much fretting: yet in a guide-book nothing is more important, not even the text; every place mentioned in the text should be marked, and conversely (for the visitor using the book in the street) the modern street-names that serve as guides should all be provided: perhaps a large folding pocket-map marked with both ancient and modern names is the answer.

ARTHUR E. GORDON

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Die Bildniskunst der römischen Republik, by Bernhard Schweitzer. Pp. 163, frontispiece, figs. 200. Leipzig: Koehler and Amelang; Weimar: Hermann Boehlau's Nachfolger. 1948.

The late republican Roman portraits have recently been studied from different points of view. Guido von Kaschnitz-Weinberg, in several articles (particularly in *Rendiconti Pontificia Accademia* 3 [1925] 346 ff. and in *RM* 41 [1926] 133 ff.), derived the Roman portrait from earlier Etruscan and central Italian portraits. Annie Zadoks and Josephus Jitta (*Ancestral Portraits in Rome and the Art of the last Century of the Republic*, 1932), believed that they had found the source of Roman portraiture in the *imago*, the death masks used in funerals and preserved in the atrium of noble houses. Frederic Poulsen ("Probleme der römischen Ikonographie," in *Danske Meddelelsen* IV, 1937) and Otto Vessberg (*Studien zur Kunstgeschichte der römischen Republik*, 1940) believed that immigrant Greek artists introduced Hellenistic portraiture in Rome, but in time Roman portraiture became romanized and independent of the Greek forms.

All these theories have some truth in them, and Schweitzer has used all three to throw light on the gradual development of the purely Roman portrait, as distinguished from the Greek art of portraiture. Schweitzer not only tries to find the roots of Roman individual portraiture but to grasp the single phases of its stylistic development and the events and facts behind this development. He therefore looks at the whole field of artistic, traditional and spiritual relations reflected in the portraits preserved for us. He studies the growth and the maturity of the Roman portrait form in all its steps from a specifically Italian portrait form to the sculptures realization with the help of the Greek forms. These models begin with late

Hellenistic, then change to early Hellenistic, and finally, to classic Greek portraits.

The difference between contemporary Hellenistic and Roman portraits are perhaps for the first time brought out very clearly (chapter I, pp. 11-33). While Greek portraitists materialize the spirit in the outer form, of which they make a synthesis, the Romans take the outer form of the human face with all its wrinkles, folds, warts, and distortions, and make an analysis of all visible and touchable forms. While the Greek heroicizes the individual and lifts him into a higher sphere, the Roman wants to comprehend the sum of life expressed in the face as a result of the struggle between man and fate. Therefore old age is preferred, when decades have had time to mould the face. While Greek art rendered ugly old age only in low class or barbarian people, for the Romans the scars of life became venerable. Most of the republican portraits are those of *pater familias* of genteel families. They had to show their *virtus* to the descendant, who preserved the portrait on account of *pietas*. These are the two main virtues demanded by the Roman state. Hence the ancestral portraits, showing the virtues of the older generations reflected in their physiognomies as a model for the younger generations, are preserved first in the death masks described by Polybius and later reworked in terracotta, soft stone, or marble.

Due to the *pietas* we have not only contemporary portraits but also many copies of such portraits up to the end of the second century A.D., when the noble families in which the ancestors were venerated died out (chapter II, pp. 34-51). This is the reason why we have so many copies of portraits not only of well known personalities like Pompey and Caesar, but also of unknown republican personalities, like the so-called Marius and Sulla in Munich (pp. 111 f., figs. 168-173). Each descendant of an outstanding ancestor needed copies for his ancestral gallery.

On the ground of all these sound principles Schweitzer tries to distinguish groups and series of Roman republican portraits (chapter III, pp. 52-127). He distinguishes four groups (A-D) in the first third and three groups (E-G) in the second third of the first century B.C. Each part is accompanied by a group of illustrations with the same characteristics.

A. Precursors and late branches of middle Italian portraiture (pp. 53 ff., figs. 44-51). These have abstract cubistic forms, the oldest being the head of Ennius (died 169). There is not yet any Hellenistic influence, and therefore no spiritual concentration.

B. Hellenistic and Hellenized portraits (pp. 59 ff., figs. 53-68). These portraits are from the period of Sulla, with the first Hellenistic influence. The best example is the General from Tivoli (figs. 63, 65-66).

C. Hellenistic and Latinized portraits, (pp. 60 ff., figs. 70-84). The faces of old peasants, who became

the military and political leaders of Rome in the early first century, show the first blending of spiritual Greek with the factual Italian portraiture. The Greek synthesis is replaced by the Roman analysis. The ancestral portraiture, and with it a biographical element begins to work on the Hellenistic portrait art. Schweitzer dates the *Arringatore* in this period.

D. Portraits of old Romans (pp. 72 ff., figs. 85-98): This is a purely Latin group, to be dated around 70 B.C. The faces of the military nobility, which had developed from old peasant stock, are shown with all their folds, hollows, warts, sacs in the skin, in the spirit of the ancestral portraits. Schweitzer distinguishes a toreutic and a woodcut style.

E. Picturesque-pathetic trend (pp. 79 ff.): Schweitzer distinguishes two groups. First group: (figs. 99-115, 118, 120). The heads are constructed on the conception of organic build. Their models are early Hellenistic heads like Philetairos and the Stoic Zeno. Greek universality and Roman energy have merged together. A good example is the Norbanus Sorex of Pompeii, declared by Schweitzer as the older Sorex, the actor associated with Sulla (figs. 99 and 103). Second group: (figs. 117, 119, 121-125, 140 f.), based on such models as Seleucus I of Syria (fig. 116). In the portrait of Pompey this trend is consummated. Compared with the Hellenistic models, however, these heads are sober and have many more small details.

G. The plastic-idealistic and plastic-realistic group (pp. 91 ff., figs. 135-139, 142-174) includes the portraits of Cicero, Caesar and the young Octavianus, the latter seen on his coin of 29 B.C. (fig. 167). Classicism, that is, the influence of older Greek art of the classical period, begins to give to the portrait the reserved coolness which later became characteristic of Augustan art. The surface movement becomes more delicate and leads to the rendering of the spiritual essence instead of the appearance of the surface only, as in the older portraits. Yet they still keep a certain realism, which Schweitzer divides into a severe and a rich style, and which revives the old Roman biographical realism. The spirit, however, asserts itself. Thus, the Romans found their own plastic form. Only a few important traits are selected and the personality is monumentalized. Greek idealism is reduced through Roman descriptive objectivity. Not the general beauty, but the nobility of a genteel person is expressed. This, indeed, is Roman, not Greek classicism. The plastic Greek form and the non-plastic Roman portrait ideas have found their union, particularly in the portraits of Caesar (figs. 152, 154-5, 158, 161-2, 166). It was, therefore, not in the East but in Rome that the late Hellenistic classicism, already begun on the Greek mainland in the middle of the second century, became creative again. Schweitzer compares the period rightly

with the art of portraiture as practised by Houdon and Falconet in eighteenth century France, where the same conditions, classicism, enlightenment, and expectation of a new savior, led to similar art forms.

To this important and convincing historical survey Schweitzer adds two other series, naming them workshop groups. His series H, Workshop of the Dresden old man (pp. 114 ff. figs. 175-185), comprises portraits of 60-20 B.C., which in my opinion belong mostly to his group D, Portraits of old Romans. His series J, Workshop with eclectic style in the time of the second triumvirate (pp. 120 ff. figs. 186-197), has so many cobweb threads leading to most of the other groups, that I fail to get an understanding of the particularity of this group J. I am afraid that Schweitzer's "Master of the Leningrad bronze bust," "of the Venetian melancholic," and "of the Bronze Ludovisi" will remain shadowy and not clearly defined personalities.

In the last chapter (chapter IV, pp. 128-140), Schweitzer sums up the stylistic forms and changes of the pre-imperial Roman portraits. The rich artistic possibilities of the last century of the republic have created many layers over the simple late Hellenistic foundation, which had previously been brought to Rome by Greek immigrants. Roman ideas overpower this foundation, particularly the realistic-biographical trend. The relationship to Greek portraiture is not passive, as has been mostly assumed, but active. Particularly the portraits of Cicero, Pompey and Caesar broaden and deepen the art of portraiture. By choosing different periods of Greek art as models, the Roman's own style evolves to always richer and more refined individual traits, characterized by general spirituality and a serene dignity. We find the same combination in the poetic works of Horace and the writings of Cicero. Realistic Roman and idealistic Greek portraiture gave a new alloy to the art of portraiture, as they gave to all Roman art. Even the most Hellenized Roman portraits are still documents of the life and thought of the individual, of his family, of his gentility, of the Roman state and its ideals. The Romans turned away from the late Hellenistic Graeculi who created the "neo-Attic" art, to the great past of the Greeks.

Thus Schweitzer has brought out, perhaps for the first time, the importance of the first century B.C. for the history of art and civilization. It is the period when not only Roman portraiture, but all other aspects of the Roman civilization absorbed and then replaced the Greek. His deeply dug and subtle investigations bring out, as no other book does, the differences between Greek and Roman civilization, and particularly between the art of Greek and Roman portraiture. Who can still continue to call Menander "Vergil" after reading pp. 95-99 and comparing (figs. 134-137) the Menander in Copenhagen and the Cicero

in Apsley House? Reading this book is unfortunately not easy, for Schweitzer writes in a rather involved style, but it is rewarding for those who have sufficient knowledge of German.

The usefulness of the book is enhanced by a chronology to chapters III-IV (pp. 142-3), a list of artists and their works (pp. 144-146), although there is not a single artist known by his proper name—the names are derived from their main work; by a list of illustrations (pp. 147-151), a list of works discussed, arranged according to the museums (pp. 152-158), and an index of names and objects (pp. 159-163).

COLUMBIA UNIVERSITY MARGARETE BIEBER

Libellus de Regionibus Urbis Romae. Recensuit *Arvast Nordh*. (Skrifter utgivna av Svenska Institutet i Rom, 8°, III). Pp. 113. Lund, C. W. K. Gleerup, 1949. Sw. Kr. 10.

Two closely related catalogues of buildings, monuments, and landmarks of Rome, with the items distributed among the fourteen regions of the city, have been preserved for us in two interpolated recensions, the *Curiosum*, and the *Notitia Urbis Romae*. These were probably composed by the fourth century, and their importance has long been recognized by students of the topography of the ancient city, but the nature of the manuscript tradition, and the nature and interrelation of the documents themselves have remained obscure and the subjects of dispute. The author of the present edition of these documents has placed us doubly in his debt. The prolegomena to his edition make available in Latin the chief observations, arguments, and conclusions contained in a detailed study which he published in Swedish in 1936, and take account also of more recent work, such as the edition of Valentini and Zucchetti, which appeared in 1940 and 1942; and he has now gone on to give us the text for which his study was a preparation.

The author's first and main contribution consists in his full and careful citation of manuscript readings and his clear analysis of their relationships. He establishes that **O** is the basis for the text of the *Curiosum*, and that **b** and **c**, which are derived from it, may be disregarded except where **O** fails; while in the text of the *Notitia* chief reliance should be placed on **p**, the consensus of **A** and the Spirensis readings, and only sporadically on other manuscripts such as **S**. A comparison with the text of Jordan (*Topographie Roms* II 537-594) reveals that Nordh has improved the texts of both documents considerably, both in the readings and in the division of items. In addition he has at times adduced inscriptional evidence to justify forms indicated by the evidence of the manuscript tradition, e.g. 79, 3, *Dafinidis*; 80, 1, *Macellum Liviani*; cf. 94, 5, *Syres* (see Platner-Ashby p. 533). At 93, 5, however the text accepted in the *Notitia*,

privatam Hadriani, appears to be at variance with the statement of the author on pages 47 f.

The author presents us with a careful review of the theories that have been offered regarding the nature of the documents. He is inclined to hold to his earlier view that they are pre-Constantinian, and that they began as designations of regions and subdivisions of the city, but were confused with formal descriptive catalogues, and hence received many insertions intended to make them more complete from the standpoint of a guide-book. But he admits the obscurity of the problem and the arguments that limit somewhat the full acceptance of his view. On the inter-relation and relative dating of the documents his contribution is one of method. He points out convincingly the insecurity of the body of argumentation, particularly by Mommsen and Jordan, based on discrepant details in the documents themselves, when those documents have admittedly grown by interpolation, and especially when the *Curiosum* depends on only one manuscript. On more general grounds, though still chiefly as a result of his study of the manuscripts, he holds, against Mommsen and Jordan, that the *Curiosum* in an earlier form was the basis of the *Notitia*, and that both works represent two stages in the process of interpolation. Moreover, the *Notitia* has no inherent connection with the Chronographer of 354, being found with him in only one manuscript S.

T. ROBERT S. BROUGHTON

BRYN MAWR COLLEGE

Excavaciones de Asta Regia (Mesas de Asta, Jerez) Campaña de 1945-46, by Manuel Esteve Guerrero. Pp. 38; figs. 5, 2 maps, pls. 32. "Informes y Memorias" No. 22. Ministry of National Education, Madrid 1950. \$3.00.

The publication of the excavations at this site in southwestern Spain during 1945-46 continues the work described by the author in a book by the same title covering the 1942-43 season and published in 1945. In the earlier excavation, at the highest point of the site, only two levels could be fixed with certainty—the upper dated in the time of the Caliphate and the lowest, a culture of cabins, assigned to the beginning of the Mediterranean Bronze Age. Between these levels was confused material from the Iron Age through the end of the Roman Era.

It was decided then to excavate at a lower point, at a spot called "La Cantera" which, although on the perimeter of the urban area, seemed to be well within the city. Also, it was judged that there good results might be obtained for the modest funds available. Convinced as the author is that the excavation of Asta will be the work of years, he wished first to prove the possibilities and to provide the necessary framework for the complete excavation of the city,

by preparing a topographical plan of the plateau on which the city is located, outlining its limits, fixing the excavation sites, learning where casual finds had been made, locating the necropolis, etc.

The new site is at the extreme southeast part of the plateau about 400 m. from the 1943 site. An east-west trench 10 m. long was opened. It brought to light an Arab pavement of concrete, Roman and Campaniform pottery, polished axes, and Iberian ceramics. At the two meter level, walls probably belonging to the Iberian-Roman town were found resting on the Tertiary limestone rock which forms the geologic base of the plateau. Additional material included fragments of Roman vases and lamps, bronze nails, coins, and a female figure 0.435 m. high of good Roman workmanship, which was identified as Juno Pronuba. The finds in this second season corresponded to those of the first from the Bronze Age, Iron Age, Roman and Arab periods.

The author comes to no definite conclusions since the work was on a small scale, but limits himself to repeating what he said in the first publication that the excavation of this site offers scientific interest even though it may not prove to be Tartessos as some believe. The material thus far does not preclude this possibility, and so small a part of the 43 hectares that the city covers has been touched that the negative result has little significance. With more adequate funds it is logical to suppose that some day an area will be located where it will be possible to establish archaeological levels.

The plates show the site, excavations and materials found and described.

SPRINGFIELD, VT.

WILLIAM J. BRYANT

Excavaciones en el Santuario Iberico del Cigarralejo (Mula, Murcia), by Emeterio Cuadrado Diaz. Pp. 239, figs. 29, pls. 87. "Informes y Memorias," No. 21. Ministry of National Education, Madrid 1950. \$8.00.

This book describes the excavation of an Iberian town in south-east Spain, and lists the finds—particularly those of the treasure of Iberian "exvotos" from the sanctuary. An analysis of this material throws additional light on the origin and development of the Iberian culture and its much debated chronology.

The point of interest which sets this site apart from others containing Iberian sanctuaries is the unusual number of sandstone figurines of horses. These sanctuaries characteristically contain besides the usual votive offerings of rings, fibulae, necklaces, weapons, etc., human and animal figurines, bulls, horses and birds. In this sanctuary there are very few human figures and the animals are exclusively horses. Hence the author devotes a substantial part of the book to a careful study of these equine figures.

Cigarralejo is a precipitous hill one and a half kilometers north-east of Mula in the province of Murcia. From nearby finds it seems that this was a densely populated area in pre-Roman times and further exploration will bring to light sites now unknown since this region is now almost virgin soil, archaeologically speaking.

Excavations were made on the summit of the hill, part of the extensive unexcavated area. The author describes the defences and gives a room-by-room account of the buildings found. Houses at the lowest level appear, from the evidence of the pottery, to belong to the Second Bronze Age. Immediately above was the level with the "exvotos" characteristic of a primitive Iberian sanctuary. This material consisted of loom weights, rings, copper disks, fibulae of Hispanic type, weapons, necklaces of painted clay and blue vitrified material, fragments of Iberian pottery with geometrical or floral designs and 179 sandstone figures more or less complete and a great number of fragments.

After a chapter on the usual "exvotos," abundant and elaborate at other sites, and a short survey of the scarce human figurines, the author undertakes the task of classifying the equine figures. He divides his study into sections on: saddles; bridles; decorations; and the care of manes, tails and forelocks. It is evident from these figures that the Iberian warriors lavished much care on their horses.

Year after year archaeologists discuss without agreement the dating of the apogee of the Iberian culture. According to the traditional viewpoint of Professor Bosch Gimpera, the culmination was reached between the sixth and third centuries B.C.; the modern viewpoint, established by Professor Santa-olalla, places the apogee between the beginning of the Roman conquest and Augustus. The approach the author uses to clarify the dates at Cigarralejo is a comparison of these finds with those from other known sanctuaries in Spain from a point of view of technique and style.

In the sanctuaries already excavated there has been no absolute chronology because the material was not associated with datable objects. The relationship between the Andalusian sanctuaries and those of the province of Albecete is apparent and the material from Cigarralejo is quite similar, particularly to that from Cerro, making it possible to conclude that they are contemporary. The fragments of Attic vases indicate that the sanctuary was in existence in the fourth century B.C. and the Campaniform ceramics plus the lack of "Sigillata" brings us to the first century. The bridle decorations of curved wings, half moons, and the rings can be dated from the fourth to third centuries. The sanctuary must have been destroyed in the second half of the third century during the Hanni-

balic wars. Reconstructed some time afterwards, it must have been destroyed again in the second century during the Celtiberian wars. The male and female figures, like those from Cerro, predate the destruction at the end of the third century and the upper limit for the horses would be the fourth century with a climax in the third. After this date Roman influence is apparent.

In a nearby necropolis from the same period as the sanctuary, forty-six tombs have been opened in two seasons of excavation. These are in two layers; in the lower there is a profusion of Attic and Campaniform ceramics of the fourth century B.C. So far no Roman pottery has been found.

The appendix contains a detailed inventory (55 pp.) of the finds with reference to the plates, and lists dimensions, material, color, subject and date of find. The plates give adequate views of the site and excavations as well as of the individual objects.

The author states that of all the provinces of the south-eastern part of Spain, none holds so many surprises and is more rewarding to the archaeologist than Murcia and that in all his years of excavating the region west of the Segura river, he has never had so much satisfaction as with his two years' work on the site called Cigarralejo.

SPRINGFIELD, VT.

WILLIAM J. BRYANT

The "Scythian" Period. An Approach to the History, Art, Epigraphy, and Paleography of North India from the 1st Century B.C. to the 3rd Century A.D., by J. E. van Lohuizen-de Leeuw. Pp. x + 435, pls. 51, Leiden, Brill, 1949. Hfl. 42.

Much of the author's effort has gone toward clarifying the chronology of Northwest India and Afghanistan during the half millennium of invasions and foreign domination between the Sunga and Gupta dynasties. There can be few more perplexing problems in history than this. The events themselves must have been confused; the state of the records is bewildering. Since no contemporary Indian annals exist, the would-be historian must fall back on secondary material, chiefly the mentions of Indian events in foreign writings, and inscriptions found in the area. The foreign citations are fragmentary and not wholly credible. The inscriptions, primarily records of gifts to the Buddhist or Jain churches, were made without historical intention; many, also, pose thorny problems of decipherment. A large number are dated, but not even these suffice to construct a stable framework. It is particularly baffling that the date is always calculated with reference to an era whose initial year is not stated.

In revealing these difficulties, Dr. De Leeuw has summarized the attempts of several generations of modern scholars to find a way through the quagmire.

Here confusion has reached its climax. Theorists have strayed in every direction; no proposal has won more than a temporary plurality of support. Again and again the discovery of a single new item of evidence has been enough to set up another violent oscillation. Even the course followed by a single expert like Sten Konow has been disconcertingly erratic. Solutions to the era problem have proposed a Seleucid reckoning from 312 B.C., or a Mauryan from 321, or a Parthian from 248, or an "Old Saka" from around 150, or another from around 84, or a Vikrama from 58, or an era set up by Azes in 57 (to cite only the best-known early variants). Konow's last conclusion was that no less than seven eras, several used simultaneously, were required to explain the inscription dates.

The author's share has been a drastic simplification. In her reformed chronology only two eras are needed to cover the five centuries involved. The first takes in the known inscriptions in Kharoṣṭhī and Brāhmī that fall between 58 and 200, and also a smaller group from 303 to 399. The second, identified by the names of kings of Kaniṣka's dynasty, has no known date higher than 98, and so can be fitted neatly into the century-wide gap between the two groups of the first system. Not only Kaniṣka's era but also the other is Kushan. To locate the original first year, Dr. De Leeuw supposes that it commemorated an event that took place outside of India, since no inscription prior to that of the year 58 has been found. All the non-Indian eras previously suggested have raised doubts. The author brings forward a new one free from their disqualifications: the conquest of Bactria around 129 B.C. by the ancestors of the Kushans. The well-known names of the first centuries before and after Christ take their place on the single scale fixed by that victory; Maues around 60 to 50, Azes 50 to 30, Gondophernes 30 to 15. The Kushan conquest of the Northwest was first announced by Kujūla's unification, from around 25 B.C. to A.D. 35, and was extended by his son Wima until 62 or later. With a possible break thereafter, the reign and era of Kaniṣka began in 78, just a little over 200 years after the first epoch-making victory. The last great Kushan monarch, Vāsudeva, ended his sway in the year 98 of his latest inscription, A.D. 176. The author believes that the dynasty continued under less powerful descendants, later Kaniṣkas and Vāsudevas, into the early third century. The inscriptions reflect this stage of disintegration in two ways. A Gandhāran group, including the famous Buddha statues of Lōriyān Tāngai and Haṣṭnagar, returned to the old way of reckoning, then in the 300's. At Mathurā the Kaniṣka era was continued through most of a second hundred years (to A.D. 250 or later); but without the use of royal names, and omitting the digit for 100.

It is obvious that Dr. De Leeuw has prepared her argument on the basis of an extremely conscientious study, and has worked with great energy, courage, and honesty. With the greater regret, therefore, the reviewer records his inability to accept the era of 129 B.C. with any more confidence than its predecessors. One might question first the author's claim that her era must have begun outside of India because 58 years elapsed before its first (known) date was inscribed on Indian soil. A major difficulty, again, is the fact that the supposed Kushan epoch has no identifiable Kushan users until the year 103. Instead, its earliest names are "Scythian," and a long string of successors are "Indo-Parthian." The author argues that the victory in Bactria was won by a mixed people including the Sakas or Scyths; and that it was the latter component that first pushed down into India, early in the first century B.C. But this is very shaky ground, with as much evidence against it as for. Even harder to accept is the claim that the Kushan triumph was commemorated for two generations or so by shahs and satraps of Parthian stock, the natural enemies of Kushan and Saka alike, whose rule in India was first threatened and then extinguished by Kushan expansion.

It is a major asset of Dr. De Leeuw's chronology that her second era not only dovetails neatly with the first but begins with a year already favored by a powerful body of opinion. Her Kaniṣka era of A.D. 78 thus corresponds with the "Saka era" of Indian tradition, remembered by Alberuni, for example, as having begun 241 years before the Gupta (of A.D. 320). This portion of the hypothesis is more conventionally presented. The arguments advanced and the counter-arguments outlined and rejected are far too diverse for summary here. The reviewer's own preference for a date around 50 years later is based largely on a factor that Dr. De Leeuw has almost completely overlooked. By her scheme the great age of the Kaniṣka dynasty came to an end around A.D. 176. There followed "the crumbling of the large Kusana kingdom after Vāsudeva I into a number of smaller independent states." She cites properly the Chinese record (the history of the Three Kingdoms era, *San Kuo Chih*) that in A.D. 230 an envoy reached the Wei court from a "King Po-t'iao of the Great Yüeh-chih," interpreting that Vāsu as a second of the name. But it must have been a still very powerful monarch who was able to send a party safely across the Asian continent. On this point the same Chinese source is explicit. A note explains that in the Three Kingdoms era (the middle decades of the third century) the Yüeh-chih domains included Kashmir and the Punjab, Bactria, Afghanistan, and India. In 230 the Kushan monarch was presumably seeking Chinese aid against a serious new threat, the expansion of Sasanian Persia. The reason

for the Kushan breakup is far more plausibly found in the victories of Ardashir and Shahpur I in the second quarter of the century than around 176, when no major adversary can be identified.

The chapter on Gandharan sculpture serves chiefly as a sequel demonstrating the effect of the author's chronology. Between the wide extremes reached by earlier scholars, her choice brings her fairly close to the position maintained by Rowland. The two dated Buddhas on whose place in the historical sequence all have laid great emphasis—the Loriyan Tāngai figure of the year 318, and that of Hashtnagar (or Chārsada) of the year 384—she ascribes to A.D. 189 and 255. Rowland's dates had been 168 and 249. Dr. De Leeuw spends some time demolishing the system most elaborately formed on a radically different chronological basis, that of Bachhofer (whose corresponding dates are A.D. 6 and 72). The latter's premise had involved him in extraordinary difficulties. The style of the dated statues is, in the Gandhāran sense, classic. There is a strong strain of classicism in other Gandhāran images whose link with the sculpture of Hadda makes a third or fourth century date probable. Bachhofer had been forced to assume that the original classicism, surviving from the Hellenistic age, had first yielded to a style of marked decadence (in the Kushan age of empire), and then had bred in its own likeness a late phase of neo-classicism. This improbability is at once removed by the choice of a later dating system like De Leeuw's of Rowland's. The stylistic similarities between the figures dated in the 300's and those comparable to the Hadda style become natural when their dates are brought within a century or two of each other; the two groups belong to the same process of stylistic change.

On other questions about Gandhāran sculpture the author takes a stand beside one or another earlier authority. The inherent classicism of the art must in large part be due to the penetration of Hellenistic forms into the area under the Philhellene Parthians (this again had been part of Rowland's hypothesis). Its development in Buddhist use must have gathered momentum only with the reign of Kaniška, after A.D. 78. Its course was thereafter ascending, into "a golden age . . . from the middle of the second century A.D. onwards." This standard continued as late as the fourth, and then gradually yielded to a new style with Central Asian affinities. Dr. De Leeuw has wrestled at length with the problem of fitting into her sequence the two famous and always troublesome metal reliquaries. Kaniška's she takes as typical of the style of that monarch's generation. Since her system requires that a more classical and technically expert work be placed higher on the curve rising toward the "golden age," she gives the Bimārān casket a date considerably later than that suggested by the

circumstances of its find; it is likely to be later than the first century A.D. (In the reviewer's opinion two factors largely invalidate such a comparison. The Bimārān casket, found in Afghanistan, is not Gandhāran in the geographical sense. The Kaniška reliquary is not Gandhāran in the stylistic sense, since in all probability it was made by a metal-worker from Mathurā, as Mirella D'Ancona has shown).

In a study of one of the characteristic late Gandhāran forms, the author concludes that the typical details were borrowed from Mathurā. She argues against Foucher's claim that most of these Buddhas were intended to portray the "miracle of Śrāvastī"; and reinterprets the function of the flanking figures as being merely divine worshippers, or Bodhisattvas (rather than Brahmā and Indra).

Like other experts, Dr. De Leeuw suffers from the defects inherent in her special assets. As a trained epigraphist she is admirably equipped to handle the general Indian historical problems that depend on an accurate critical reading of inscriptions. Her discussion of the sculpture of Mathurā, where that factor is of first importance, is masterly. There are few inscribed monuments in Gandhāra, however, and among the broad problems of that art the epigrapher's habit of concentration on small details can have only a limited success. Looking so hard at drapery folds and ways of rendering hair, she has overlooked much that is essential to understanding. Because she is almost oblivious to anything beyond the single Buddha figure, she recognizes nothing of the evolutionary process visible in the vast majority of Gandhāran sculptures, which are reliefs. She detects neither the strong academic classicism of one phase of relief design (in which the reviewer sees a Hadrianic stimulus), nor the equally marked lateness of another in which are present many of the familiar signs of the *Spätantik*. Of an art essentially cosmopolitan she has little to say about outside influences, especially those coming from the West (whether Roman or Sasanian). Even her acquaintance with the written words relevant to a discussion of Buddhist art seems at least partly limited by the interests of an epigrapher. Presumably this inexperience is the reason for her almost complete silence regarding iconographic problems, and particularly for her failure to acknowledge one of the most powerful pressures operating in Gandhāran art as a whole: the ever stronger tendency to deify the Buddha at the expense of his humanity.

With the more congenial data offered by the sculptures of Mathurā the author has worked out the first convincing and comprehensive typological sequence ever achieved for that school. Here also but with more justification, her analysis is limited almost entirely to single icons, Buddhas or naked Jinas. The majority sit on lion thrones; a large number are dated.

The earliest types, falling around Kaniška's time, are strongly Indian, with the thin dress, bare limbs, and spiral topknot seen, for example, on the Katra stele. Around the turn of the first half century of Kaniška's dynasty a strong tide of Gandhāran influence brings in a new Buddha type, clothed in the heavy monk's robe, with folds falling symmetrically from both shoulders. A final standardization is reached in a Buddha like that from Sahēth-Mahēth, probably under Vāsudeva I. The drapery is more correct then, from the Gandhāran standpoint, since the folds fall assymmetrically from the right shoulder. On the other hand a reversion to Indian taste is shown by the return to uncovered legs. Lesser changes include a marked development of the throne.

Dr. De Leeuw's crowning accomplishment has been to detect the signs of a second Kushan century at Mathurā, identifiable partly by sculptural style and partly through inscriptions (which now omit both the king's name and, she believes, the digit for 100 in the date). These statues, with their apparently early dates, have in the past obstructed any attempt to create an orderly Mathuran sequence. Gathered to one side, they leave Kaniška's century understandable; while their own characteristics now take on meaning as a natural transition to the style of the Gupta age.

Dr. De Leeuw's book accomplishes only a part of her intention, and has the defects, as well as the virtues, of a doctor's dissertation. It is at least a contribution of first importance, and will surely remain a key item in the bibliography of the field for many years.

BRYN MAWR COLLEGE ALEXANDER C. SOPER

Classical Indian Sculpture 300 B.C. to 500 A.D., by *Chintamani Kar*. Pp. viii + 38, pls. 86, and map. Alec Tiranti Ltd., London, 1950, 6 s.

A popular account of Indian sculpture from the Mauryan to the Gupta period, the examples illustrated having been selected chiefly because of their artistic qualities. The photographs are very good and include a number of little known pieces, such as a meditating Buddha from Gandhāra, now at the Royal Scottish Museum, Edinburgh (fig. 60).

YALE UNIVERSITY HARALD INGHOULT

The Coffin of Saint Cuthbert, drawings by *D. McIntyre*; introduction by *E. Kitzinger*. Pp. 6, ill. 3, pls. 5. Oxford University Press, 1950. 16 s.

The securely dated works of early Anglo-Saxon Christianity being few in number, much interest is to be attached to this publication of the wooden reliquary coffin in which the remains of Saint Cuthbert, Bishop of Lindisfarne in Northumbria were deposited in A.D. 698. The present physical state of the engraved oak

boards is made known through drawings in half actual size by Donald McIntyre, Cathedral Architect of Durham. The incised designs, representing Christ surrounded by the four symbols of the Evangelists, the seated Virgin holding the Christ Child, the twelve Apostles and seven Archangels, are described by Ernst Kitzinger of Dumbarton Oaks, Harvard University. In his necessarily brief text—for this is but a preliminary study—Kitzinger deals most provocatively with both the meaning and the origin of the linear carvings. The designs "form part of a litany in pictures, since they represent the powers whose protection was invoked for the sacred relics"; their origin is to be looked for in iconographic and stylistic models of the Mediterranean world. Thus viewed, the coffin throws valuable light on the attitude of mind of the first Christian peoples in North England and on the first representational efforts of artists not far removed in time from the abstract art of their pagan ancestors.

AMERICAN UNIVERSITY ANDREW S. KECK

Catalogue du Musée de Lyon, III, La Sculpture du Moyen-Age et de la Renaissance, by *René Jullian*. Pp. vii + 246, pls. 48. Lyon, 1945.

This is the first volume of a series of catalogues of the Lyon Museum by M. Jullian, Director of the Museum and Professor of the History of Art at the University of Lyon. It is a descriptive catalogue with photographs of each object in the collection—that the photographs are unfortunately not always of the highest quality is unquestionably due to difficulties at the time of publication. A full bibliography is provided for each piece of sculpture and there is a thorough discussion of the date and provenance. These discussions could have been more fruitful had the author relied more heavily on the comparative method and cited related examples in other collections.

The Lyon Museum was founded at the beginning of the nineteenth century. The collections were enriched, particularly at the end of the century, by purchases in Italy and by gifts from such celebrated collectors as Eduard Aynard, and more recently by an important gift of Italian and German sculpture from the Marquise Arconati-Visconti and purchases of French and Spanish romanesque sculpture. Although the pieces here considered are seldom of the highest quality, they are all of interest and supplement the more significant examples of Greek, Roman and Gallo-roman sculpture in the Lyon Museum, to be described in another volume.

Among the best-known pieces of Romanesque sculpture described in this catalogue are: the "jongleur," part of a twelfth-century archivolt from Bourges with an inscription closely related to Armenian; a portion of a relief from the Cathedral of Vich (another fragment

of this relief is in the Rockhill Nelson Gallery of Art in Kansas City); and a fine wooden Virgin and Child from the Auvergne. Outstanding among the Gothic pieces are those of the Italian trecento, with a graceful, polychrome Annunciation from the workshop of Nino Pisano. French sculpture of the fourteenth and fifteenth centuries is also well represented.

This kind of catalogue, with its carefully prepared text and complete series of photographs, makes museum collections available to scholars and amateurs throughout the world. It is hoped not only that the Lyon series will be completed, but that this example will be emulated by other museum curators in Europe and America.

YALE UNIVERSITY

SUMNER MCK. CROSBY

Objets Kairouanais, IX^e au XIII^e Siècle. Reliures, Verreries, Cuivres et Bronzes, Bijoux, by *Georges Marçais, Louis Poinssot, and Lucien Gaillard*. Pp. 364, figs. 67, pls. 54. Tunis, Direction des Antiquités et Arts, 1948.

A fortunate recent discovery in a storeroom in the Great Mosque of Qairawān included the sixty-odd ninth to tenth century bindings presented here, as well as later ones; the glass, copper, bronze and jewelry will presumably appear in the second fascicle, which will also include the index. This find is most important for the history of Early Islamic art, as previously only one bookbinding of the ninth century was known, the Qur'ān binding given in 270 (883-884) to the Great Mosque of Damascus, now in the Royal Library, Cairo (pp. 6, 46-9, fig. 14). The first chapter describes their format, structure, technique, decoration and chronology. Chapter II (62-282) is a thorough and detailed *catalogue raisonné* of the objects. Most of the patterns are the interlace or the guilloché; the authors discuss their relation not only to other Islamic examples, but also to those in the Ancient Near East in the fourth millennium B.C., and in classical, Early Christian, and later European art. There are some pious inscriptions (fig. 58, pl. LI) such as "Dieu me suffit" (*p* on p. 340). Two (*s* and *t*, pp. 340-41) are read as "La durée est à Dieu," but could also be read as *thiqatī billah*, "My trust is in God," which is very frequent on seal-rings of the ninth to tenth centuries. The final chapter describes the plates and figures, with corrections of some of the dates printed on the plates, to supplement Chapter II.

The authors have admirably fulfilled their aim (7): "Pourtant c'est avant tout une description aussi rigoureusement exacte que possible des objets kairouanais que nous voulons mettre à la disposition de nos lecteurs, convaincus que des travaux tels que le nôtre ne sont durablement utiles qu'en raison de la précision qu'on y apporte." This is the most exhaustive treat-

ment of Islamic bookbindings to date, and a very valuable contribution to the art of the book.

FLORENCE E. DAY

METROPOLITAN MUSEUM OF ART

Early Man in the New World, by *Kenneth MacGowan*. Pp. 224, ill. 88, index. The Macmillan Company, New York, 1950. \$5.00.

It is a real pleasure, and one all too rarely experienced, to find a book which provides sound scientific data and is also highly entertaining. It is extraordinarily difficult to present all the facts necessary for an understanding of a complex problem without becoming dull, and equally hard to popularize without tending toward oversimplification which leads to a distortion of the facts. Kenneth MacGowan in his book, *Early Man in the New World*, has done remarkably well in avoiding both these dangers.

Among the other virtues of this book is its breadth of scope. Not only does it provide a valuable synthesis of our knowledge of the earliest inhabitants of the New World but it places them in a broad context both geographically and chronologically. Too often the archaeologist tends to neglect the evidence provided by other disciplines; the specialist in New World anthropology may be inclined to overlook the importance of developments in other areas, and the student of the oldest cultures may not pay sufficient attention to work with more recent cultures which may provide valuable clues.

Although MacGowan's primary concern is with the early inhabitants of the Western Hemisphere, he also devotes several chapters to consideration of anthropological problems in the Old World, and he discusses the evidence provided by geologists, physical anthropologists, linguists, and botanists, as well as archaeological data. Among the most rewarding sections are those devoted to a discussion of parallel independent invention and diffusion.

As is almost inevitable in any publication covering so wide a range, some factual errors do occur, and the need for condensation sometimes leads to the presentation of somewhat incomplete data. A few examples will suffice.

The statement that the earliest bronze is dated at 2300 B.C. in the Danube region is phrased in such a way as to suggest that this is the earliest use of bronze in the Old World. In the sections dealing with early types of projectile points, and in the charts showing where they have been found and with what they were associated, there is a certain amount of confusion due to the lumping of a variety of types under the terms "Plainview" and "Yuma." (For critical discussion of MacGowan's treatment of the actual [or putative] skeletal remains of "Early Man" in America, and of the confused question of racial classifications and affiliations,

see reviews by Alex. D. Krieger in *American Antiquity* 17, no. 1, [1951], and T. D. Stewart in the *American Journal of Physical Anthropology* 8, no. 4, [1950]. Ed. Note.)

Although the professional anthropologist will find little that is new in this publication, it represents such an admirable synthesis that he will find it a useful and interesting addition to his library. In the library of the nonprofessional who is interested in anthropology and who wishes to gain his knowledge as pleasantly as possible its presence seems essential.

H. M. WORMINGTON

DENVER MUSEUM OF NATURAL HISTORY
DENVER, COLORADO

The Ancient Maya, by Sylvanus G. Morley. Pp. xxxii + 520; pls. 96; figs. 57. Stanford University Press, 1946. \$10.00.

In the course of numerous lecture tours from one end of the country to the other, and by means of various popular articles in magazines, such as the *National Geographic Magazine*, the late Sylvanus Morley did more than anyone else to bring Maya civilization to the attention of the general public. A man of great enthusiasm for his subject, he was happiest when "selling the Maya" to the public, as he used to say. This book can be regarded as a continuation of that long campaign, for it is a popular account of the Maya, both ancient and modern, addressed to the same audience.

The book is profusely illustrated with plates and text figures which have been chosen and arranged with great care to cover the various aspects of Maya culture. Notably fine are the photographic portraits by Mrs. Morley of present-day Mayas, and Jean Charlot's sketches of four steps in the making of a Maya stela. There are also a dozen tables including one of superlatives listing fifty items such as "city having largest ball court," "largest piece of jade carving," "most beautiful example of low-relief sculpture," and "most important single object ever discovered in the Maya area." To the reviewer's surprise, this last item proved to be the jaguar throne from the inner Castillo at Chichen Itza, a monstrosity painted red and inlaid with apple-green jade.

The archaeology is augmented with colorful chapters on the Spanish conquest of Yucatan and of Tayasal, that romantic fossil of Maya culture deep in the forests of Peten which survived almost untouched until the very close of the seventeenth century. It is hard to realize that Puritanism and Maya human sacrifice were coeval for nearly a century in the New World. There is also much information, largely drawn from the writings on Maya ethnology by de Landa, a sixteenth century bishop of Yucatan, supplemented with data on the present-day Maya of Yucatan.

Morley brings home to the reader the tremendous importance of maize in Maya life, and his chapter on Maya agriculture is an excellent discussion of the milpa system. In stressing crop yields and the time each man must spend in working his land, he brings out the point that the Maya peasant could supply himself and his family with less than three months' work each year; consequently there was ample labor available over much of the year for public projects such as the erection of pyramidal structures in ancient times and churches and monasteries in colonial times.

Morley defines Maya civilization as the culture of those Maya groups which had Maya hieroglyphic writing and the corbeled vault. Consequently, the whole of the highlands of Guatemala is ignored in this book. Similarly, the great coeval centers of culture in Mexico, such as Teotihuacan and Monte Alban, are not mentioned, for Morley holds that "the origin and rise of Maya civilization were exclusively due to the native genius of the Maya people" and the civilization "developed in a region culturally so highly isolated and practically free from all alien influences." This view is contradicted by a great body of archaeological evidence collected in the past two decades pointing to close cultural relations and interchange of ideas with non-Maya centers.

Morley still favors the theory that the "Old Empire" cities were abandoned because of milpa land becoming savanna, and that there were mass migrations of the leaders and their followers. The length of occupation of each city Morley calculates from its span of dated monuments. Yet we know that Benque Viejo, for example, which has only one very late-dated stela, was first occupied before the custom of erecting stelae started, for the ceramic sequence there embraces all periods from the very early Mamom horizon to the close of the classic period.

The same reliance on hieroglyphic texts and colonial chronicles leads Morley to ignore recent ceramic and architectural investigations in his reconstruction of the history of Yucatan. For example, the Puuc horizon, which on ceramic and architectural evidence is now generally accepted as being contemporaneous with the second half of the "Old Empire" (classic period), begins in Morley's opinion a century after the close of that period and is contemporaneous with the first part of the Mexican period.

Such divergences of opinion result from different approaches. To Morley the historical outline in the Maya chronicles is holy writ; to nearly all his colleagues these historical notes were badly garbled by seventeenth and eighteenth century writers, and must be fitted to the results of dirt archaeology. Morley would, no doubt, have retorted that archaeological reconstructions change constantly with the acquisition of new data. In a popular book it is perhaps not ad-

visible to confuse the reader with too many alternative reconstructions, but one wonders whether the author's outline should be presented as fact without a hint that his colleagues hold opposing views.

Withal, there is much to stimulate the reader in this book, as in all Morley's writings.

J. ERIC S. THOMPSON

CARNEGIE INSTITUTION OF WASHINGTON
CAMBRIDGE, MASSACHUSETTS

The Stratigraphy and Archaeology of Ventana Cave, Arizona, by *Emil W. Haury*, with the collaboration of *Kirk Bryan, Edwin H. Colbert, Norman E. Gabel, Clara Lee Tanner, and T. E. Buehrer*. Pp. xxvii + 599; pls. 66; figs. 118, and 69 tables. The University of New Mexico Press and the University of Arizona Press. Albuquerque, New Mexico, 1950. \$15.00.

The extremely important site Ventana Cave is in the desert country of the Papago Indians of southwestern Arizona, not far north of the Sonora border. Remains of human occupation range from "early man" (Palaeolithic artifacts in association with fossil bones of animals now extinct) to the historic period. The report by Dr. Haury (Head of the Department of Anthropology of the University of Arizona, Director of the Arizona State Museum) and his collaborators on the results of the excavations of Ventana Cave in 1941 and 1942 has been eagerly awaited by Southwesternists and is a contribution of major importance. The two seasons of excavation were directed by Wilfred Bailey and Julian Hayden, respectively, under Dr. Haury's general supervision.

The book is a full presentation of the factual data, with detailed analysis of artifactual, skeletal, and faunal remains and the circumstances of their finding. The first section is a twenty page introduction in which Dr. Haury reviews previous work in the Papagueria, where the Arizona institutions which he leads have carried on a well-rounded areal program of anthropological research—somatological, linguistic, and ethnographic studies of the modern Papago Indians, as well as archaeological investigation of the history of human occupation of the area.

A sequence covering the period A.D. 800-1400, deriving largely from excavations at two village-sites¹ is outlined. The material is considered to be related to the Hohokam group of the Gila-Basin area,² but striking parallels to a complex found by Ekholm in southern Sonora and northern Sinaloa³ are also noted.

The second part, also by Dr. Haury, 22-74, describes the cave itself, its location and environment and modern ecology, its deposits, and the procedure of excavation. A full and very clear account is given of the formation of the cave (actually a rather shallow rock-shelter, not a cavern) and the accumulation of

successive deposits. Part III, on the geology and fossil vertebrates of Ventana Cave, 75-148, combines two detailed technical reports by collaborators—"Geologic interpretation of the deposits," by the late Kirk Bryan, and "Fossil vertebrates," by Edwin H. Colbert of the American Museum of Natural History. Dr. Bryan's paper is devoted primarily to correlation of the deeper deposits with North American glacial chronology, with very important general discussion of correlation of Wisconsin (Fourth Glaciation) substages across North America and of the dating of the last major ice advance. The alluvial chronology of recent formations and erosional intervals in the Southwest is then summarized.

Dr. Colbert identifies the fossil mammals from two horizons, among which the tapir comes as a surprise, and presents clearly and very convincingly the probable environment and climate of the period. The mammalian remains of the two horizons represent substantially the same faunal assemblage, including the dire wolf (extinct), the coyote and the long-eared kit fox (both of modern type and found in southern Arizona today), an extinct species of jaguar, bison (a few teeth of undetermined species—the modern bison did not occur in southern Arizona in the historic period), four-horned antelope (extinct); ground sloth, an abundance of horses (the extinct Pleistocene horse of North America), tapir (a tropical creature), and Say's ground squirrel (an animal of the yellow-pine forests). The last two are startling finds in the Papago country, now hot dry desert with less than ten inches of annual rainfall. The faunal assemblage as a whole suggests, Dr. Colbert points out, a fairly moist plains-prairie environment—probably savannah or grassland, with permanent water-courses and wooded drainages. Horse remains are by far the most abundant—82 per cent of the mammalian specimens in the lower deposit, declining to 39 per cent in the upper of the early fossil-bearing layers. Only the second contains definite remains of human activity (mostly stone tools).

In Part IV, modern (i.e., later and unfossilized) faunal remains and flora—cultivated plants and utilized wild plants—of the upper deposits are listed, and their significance adequately and interestingly discussed by Dr. Haury.

The major section, Part V, 170-459, is Material Culture, which describes the archaeological remains in detail, mainly under empirical categories. First treated are stone objects and fragments of marine shell from the older deposits. The much more abundant material from the later deposits is divided between "imperishable" and "perishable" culture. The latter includes, after separate treatment of stone, shell, and bone from the earliest red sand layer, stone artifacts—flaked on one face only; biface; pecked and ground; pottery (plain, red, local painted, and imported); shell

objects (mostly marine shell from the Gulf of California); bone and horn; American and Mexican ceramic and metal objects from the top few centimeters.

Under "imperishable culture" (i.e., objects of vegetable origin and some of animal origin) are listed cordage, knots, netting, basketry (plaited, coiled, twined); wooden objects; other "plant artifacts"; leather; feathers; and finally—changing to a cultural category by use—dress and personal adornment, which includes a detailed analysis (443–459) of the Ventana Cave textiles by Mrs. Clara Lee Tanner. The historic commercial textile remains which, like a few of the imperishable objects, represent quite modern Papago Indian occupation, are also covered; the collection of perhistoric textiles (probably dating mainly between A.D. 1000 and 1400) is by far the finest to date from southern Arizona.

Part VI describes briefly the thirty-nine human burials, including ten well-preserved naturally mummified bodies, and a short section on the Hohokam and Papago pictographs is added.

Part VII (473–520) presents a full study of the human skeletal remains at Ventana Cave by Dr. Norman E. Gabel. The thirty-six burials of the pottery-bearing horizon (Hohokam) in the upper deposit and the three from the pre-ceramic level of the lower cave are separately described and compared. Only two of the earlier skeletons included crania that could be reconstructed. Both skulls are male, adult, and undeformed; both are high-vaulted and very long (narrow), with sloping, constricted foreheads; both have subnasal grooves and poorly developed nasal sills. They resemble closely "archaic" skulls from Texas.⁴

In the later group, one female and three of the four adult male crania show artificial deformation, are broad- and high-headed, large and rugged, having fairly large brain capacity, with moderately wide noses, high orbits, broad palates, and strong jaws with definite alveolar prognathism. These correspond rather closely to the Pueblo type (or Southwest Plateau type)⁵ of the more northerly and easterly parts of the Southwest. One male and most of the female skulls are undeformed, mesocranial, rather low-vaulted, with receding forehead and low cranial capacity (small brain size), narrow nose, small jaws, and no prognathism. This group is compared very successfully with modern Papago crania.

In Part VIII, Final Discussion, Dr. Haury discusses dating and the correlation and affiliations of the archaeological remains, mainly of the early lithic complex from the deeper layers; also the indicated change in economy from hunting to gathering, with maize agriculture a late introduction that did not supersede the collecting of wild plants.

An Appendix (549–563) by T. F. Buehrer (Head,

Department of Agricultural Chemistry and Soils, University of Arizona) is entitled, "Chemical Study of the material from several horizons of the Ventana Cave profile."

In this extensive report each category of material is treated separately, and the concluding discussion is devoted largely to chronological and typological problems. This is true too, with certain partial exceptions, of Dr. Haury's comparative or analytical discussions of each type or empirical category or artifact. Consequently, there is little presentation of any sort of unified picture of the life or culture of a group of people—no "cultural context," as Taylor puts it, or "feeling for his material as the product of human behavior."⁶

As a matter of fact, no very clear picture of even the chronological sequence, of typological or other events, emerges from the mass of detail, so far as concerns the archaeology itself—the human history of the place. The presentation in Part II of the erosional and depositional history of Ventana Cave (which is credited in part to Julian D. Hayden) is the most lucid and readily comprehensible narrative. To discover the sequence of horizons and approximately what the continuous history of the human occupation of the cave has been, the reader or reviewer is forced to reorganize the material for himself.

The earlier parts of the story can be relatively easily tracked down. After the rock shelter had been cut out by erosion (a most interesting story in itself, though not especially pertinent to the archaeology), and a permanent spring had developed, the spillway became blocked, forming in the cave a pool that was used by various Pleistocene animals, notably horses. The presence of man is uncertain; two very crude stone tools from the deposit formed in the pool are considered doubtful by Dr. Haury. Dr. Bryan dates this deposit to a time well before the end of W_3 (Corral Creek, Mankato, Pomeranian, Bühl).

After the pool drained and the surface of the deposit which had built up in it had been eroded, a layer of water-deposited rock debris was formed by intermittent flooding from outside and was cemented by the minerals in the waters of the still flowing spring. Roughly the same faunal assemblage, including several animals now extinct, was present in the area, and the same sort of environment as before is indicated. This deposit Dr. Bryan assigns to a humid period in the closing phases of the past glaciation, several thousand years ago.

Man was definitely present and using the cave. His only remains that have survived are bits of charcoal and a quantity of chipped stone implements, and a number of unworked fragments of large *Cardium elatum* shells (undoubtedly from the Gulf of California, a hundred miles or so to the south), which Dr.

Haury interestingly suggests might have been used as containers for liquid. The ninety stone artifacts of the "Ventana complex" are those of a hunting people, designed to pierce, cut, and scrape. Dr. Haury points out; scrapers, mostly side-scrapers, constitute 70 per cent of the collection. Almost all are worked on one side only. Both percussion and pressure flaking are present.

One of the two projectile points strikingly resemble the Folsom type, but lacks the distinctive fluting because of the nature of the local material used (basalt). The other is short and broad but carefully pressure-flaked, with a shallow notch at each end of the base. In the rest of the stonework, parallels are noted both to the Folsom complex, as known from the Lindenmeier site in northern Colorado,⁷ and to the San Dieguito complex, phase I, of southern California.⁸ Evidently the early hunters used the cave occasionally as a shelter and camping place.

A considerable period elapsed during which the climate became dry. The disconformity—erosional interval—at the end of the formation of the deeper layer (*supra*), with extinct animals and the Ventana complex, no doubt represents the very dry hot period of about 5500–2500 B.C.

In a red sand layer overlying the disconformity were found a bone awl similar to later ones, a few *Cardium* shell fragments like those of the early period, and fifty-four stone tools—points and knives, scrapers, and a few choppers or planes of types found in the next layer; the rather small projectile points resemble the Pinto Basin and Amargosa I and Borax Lake types of California,⁹ together with a strictly modern fauna.

A wedge or tongue of talus encroached briefly on the floor of the cave; and the spring flow declined into subterranean seepage; the environment became much like that of the present time. Intensive human occupation built up a midden of refuse, from a few thousand years ago to about A.D. 1400. A number of deceased individuals were buried in the cave. No structures of any kind were built; any nearby houses were outside the cave, brush huts in the open.

No stratigraphy could be determined in the midden, and continuous use without a break is indicated. In the process of excavation, arbitrary levels had to be used, and the midden had grown so irregularly and had been so disturbed that it was difficult to assign everything to its niche. Nevertheless, Dr. Haury succeeded in establishing a sequence of lithic complexes (339–340), ranging from a "Chirichua-Amargosa II" horizon to the historic Papago Indians. The pottery and other materials can be correlated approximately with the successive horizons of stonework.

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ERIK K. REED

¹ Frederick H. Scantling, "Jackrabbit ruin," *The Kiva* 5, 9–12 (Arizona Archaeological and Historical Society, Tucson 1939); Arnold M. Withers, "Excavations at Valshni village, a site on the Papago Indian Reservation," *American Antiquity* 10, 33–47 (Society for American Archaeology 1944).

² Described in Harold S. Gladwin, Emil W. Haury, and E. B. Sayles, *Excavations at Snaketown, I: Material Culture*. Gila Pueblo Medallion Series, No. 25 (Globe, Arizona 1937).

³ Gordon F. Ekholm, *Excavations at Guasave, Sinaloa, Mexico*. American Museum of Natural History Anthropological Papers, 38–2 (New York 1942).

⁴ George and Edna Woodbury, *Prehistoric Skeletal Remains from the Texas Coast*. Gila Pueblo Medallion Series, No. 18 (Globe, Arizona 1935).

⁵ Carl Seltzer, *Racial Prehistory in the Southwest and the Hawikuh Zuhis*. Peabody Museum Papers, 23, 1 (Cambridge, Massachusetts 1944).

⁶ Walter W. Taylor, *A Study of Archaeology*, Memoir No. 69 of the American Anthropological Association, 1948; Frederick Johnson, review of W. A. Ritchie, "The Pre-Iroquoian Occupation of New York State" (Rochester Museum 1944), in *American Anthropologist* 46 (1944) 530–535.

⁷ F. H. H. Roberts, Jr., "A Folsom Complex; Preliminary Report on Investigation at the Lindenmeier Site in Northern Colorado," *SIMC* 94, 4, (Washington 1935), and "Additional Information on the Folsom Complex," *SIMC* (95, 10, Washington 1936).

⁸ Malcolm J. Rogers, *Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas*. San Diego Museum Papers No. 3, (San Diego 1939).

⁹ E. W. and W. H. Campbell, *The Pinto Basin Site*, Southwest Museum Papers No. 9 (Los Angeles 1935); Rogers, *op. cit.*; M. R. Harrington, *An Ancient Site at Borax Lake, California*, Southwest Museum Papers 16 (Los Angeles 1948).

Flint Quarries—the Sources of Tools and, at the Same Time, the Factories of the American Indian, by Kirk Bryan. Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, Vol. 17, No. 3. Pp. vii + 40; figs. 21. Cambridge, 1950. \$2.00.

This small monograph, coming to us shortly after the unexpected death of Dr. Bryan (August 22, 1950) serves to emphasize further the magnitude of his loss in many fields of interest. It is a tribute to his versatility that this paper is given to us by a geologist rather than by a specialist in lithic technology.

"The purpose of this paper," writes Dr. Bryan, is "to outline in considerable detail several more or less interwoven theories regarding quarries. Two main theories are presented: (1) That many of the so-called 'blanks' and 'rejects' are usable tools, mainly axes, and they were actually used; (2) that many flint quarries were not only sources of flint for export but

also industrial sites or factories to which materials such as wood and bone were brought to be worked in the presence of abundant tools."

Dr. Bryan describes three quarry sites which he has visited: the "Spanish Diggings" or Peoria Quarry in northeastern Oklahoma, the Alibates Quarry in the Texas Panhandle, and the Cerro Pedernal Quarry in northern New Mexico.

W. H. Holmes had visited the so-called Spanish Diggings in Oklahoma in 1891 and reported that in a collection of thirty boxes "no single piece . . . could be called an implement . . . no finished flaked implement . . . has ever been collected." (*An Ancient Quarry in Indian Territory*, Bureau of American Ethnology, Bulletin 21, Washington, 1894.) However, at this quarry Bryan found trapezoidal cores from which flakes had been struck and one such flake which had been made into a utilized scraper. He also found an arrow point made from the quarry material, carefully retouched flakes, triangular and discoid bifaces usable as scrapers, oblong oval blades or "hoes" and large bifacial "blanks." Holmes, admitting that these latter resembled Paleolithic axes, termed them "an abortive attempt at blade-making." Bryan found ample evidence that the large biface blanks were actually used at the "Spanish Diggings" and at the other two quarries, where the same general situation prevailed.

Although Bryan praises Holmes' series of investigations of quarries and American Indian mines (1890-1904) as "one of the great monuments of American archaeology" he charges that "Holmes was obsessed by the origin of the bifaces and neglected to analyse the irregular and flake tools and says we cannot 'assume that these implements were used in quarrying . . . It seems obvious that they were used in some other industry which required very large numbers of scraping and cutting edges. Presumably the manufacture of objects of wood and bone was carried on coincidentally with quarrying."

Bryan elaborates this thesis with a chapter on "Geographic Factors in Manufacturing," pointing to the industrial or factory nature of the quarries where materials to be worked by heavy tools or tedious processes were brought to the tool supply.

A chapter on "The Heavy Bifaces" includes an excellent and concise discussion of the hafting and use of chipped axes and their breakage. From his collections Dr. Bryan demonstrates that the flint workers reused their broken axes as cores from which flakes were removed by both the Clactonian and the Levallois techniques.

Because of the importance of quarries in primitive economy, the paper concludes with a plea that we investigate quarries further with such studies as that

by Heizer and Treganza in California. The final four chapters include several suggestions to guide and stimulate such studies.

This study is admittedly not exhaustive, nor is the bibliography intended to be definitive. But Americanists who have permitted the Holmes theory of the blank to become dogma, and have uncritically accepted the idea that quarries existed only for the production of exportable material, will find this a valuable refresher course. And all who deal with or talk about stone tools should discover this to be interesting reading.

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Uaxactun, Guatemala: Excavations of 1931-1937, by A. Ledyard Smith. Pp. xii + 108; 141 pp. of figures; 2 maps. Pub. 588, Carnegie Institution of Washington, Washington, 1950. Paper, \$9.00; cloth, \$9.50.

With a companion volume on ceramics by R. E. Smith, this book completes the final record of digging through twelve consecutive seasons by Carnegie Institution. Results at this site, in the center of the Classical Maya area, have changed basic ideas respecting the history of the ancient Maya and their role in Meso-America as a whole.

There is an introduction by A. V. Kidder which ought to be read by anyone interested in American Indian civilizations. For the most part the report proper is organized description and exposition for use of other archaeologists, and availability of other publications concerning the site is assumed. The other titles, needed for a complete site record, are listed in the bibliography under R. Wauchope, 1934; O. G. Ricketson and E. B. Ricketson, 1937; A. L. Smith, 1932 and 1937; R. E. Smith, 1937 and in preparation; and S. G. Morley, 1938. The present volume deals with that all-important category, architecture, and with some 116 burials and 64 ceremonial deposits encountered while digging for architecture. There is a generalizing chapter in which the architecture is reviewed topically and a short similar one on the burials and caches, with detailed descriptive lists of the latter as appendices.

What is here described in detail for the first time comes from the last six seasons. During these, under Smith's leadership, emphasis shifted from Group E (see Ricketson and Ricketson) to other parts of the site. There is very great reliance on photographs and drawings, the volume being more than half pictorial. By thumbing through this splendid set of illustrations any reader can at once satisfy himself that a great deal of complicated digging has been accomplished by a master of the art. If he is little versed in Maya archaeology as a specialty, he may find it harder to appreciate

fully what it is all about. The reviewer feels competent to assure such readers that important problems were first visualized, then attacked and solved.

It will be a long time before the value of what was learned can be fully weighed. As of the present, it seems to me that Smith's major accomplishment has been really to establish the fact that Maya architecture did not appear full blown on the earliest Classical horizon. G. Elliot Smith would have found this Uaxactun record very bothersome. I would also suggest that when Harold S. Gladwin prepares a new edition of his recent *Men Out of Asia* he will be forced either to ignore the facts presented here or else to modify profoundly his "Alexander's Fleet" explanation of high culture in Pre-Columbian America. The Uaxactun findings must also be allowed for as one examines the current less sweeping theories concerning the trans-Pacific diffusion of specific elements of art and religion.

Besides much else, Smith has demonstrated that what might have been called a typical "Old Empire" acropolis started as something else. The beginnings of this "Structure A-V Complex" were on a horizon when the technique of burning lime for mortar and plaster was known and used, but they were modest beginnings. There was progressive growth in this A-V Complex, in respect both to size and to complexity of concept and design. One may see this at a glance by turning to figures 2 to 5, which present a series of eight reconstruction drawings in perspective, phase by phase. Though presumably drawn for this publication by T. A. Proskouriakoff, they appear also in her *An Album of Maya Architecture*. In the latter, comparison with similar drawings for other sites will show that what Smith chose for his great effort is a fair sample of Maya ceremonial architecture, and not some special case.

He was able to work out significant change not only for size and design but, within the lime-mortar tradition, in masonry techniques. As time went on he finds meaningful changes in the all-masonry roof or "Maya vault," as well as in the masonry facings of solid platforms and in free-standing walls of buildings.

By using results of all seasons, and stratigraphy combined with Morley readings of dated monuments, a dating scheme is worked out which appears to be sound and which can be summarized as follows:

About 8.12.0.0.0 (A.D. 278) Beginning of Vault I period of architecture; of *Tzakol* (Uaxactun II) pottery period; of dated monuments.

About 9.8.0.0.0 (A.D. 593) Beginning of Vault II period of architecture; of *Tepeu* (Uaxactun III) pottery.

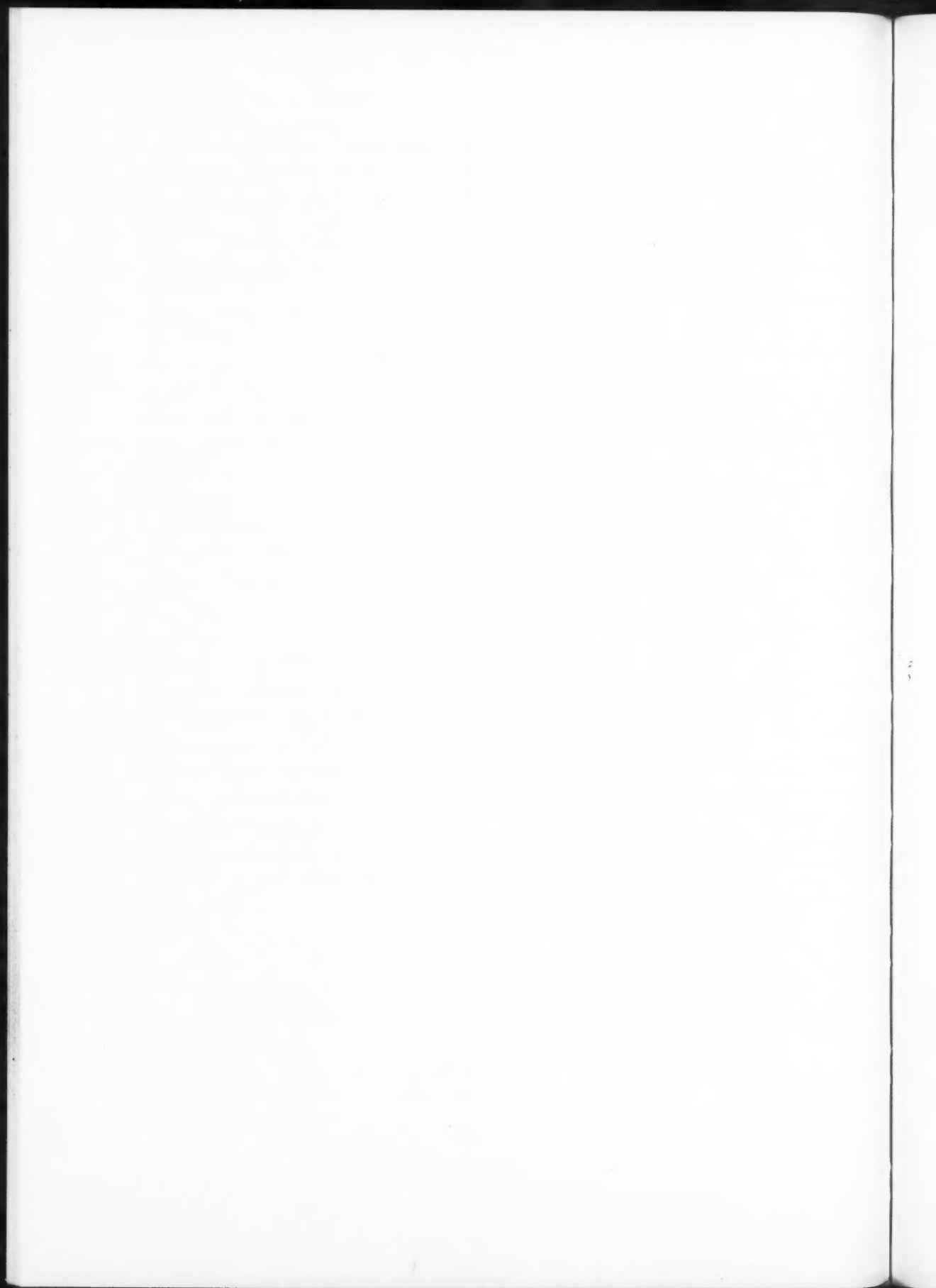
10.3.0.0.0 (A.D. 889) End of period of dated stone monuments; Vault II and *Tepeu* periods "continued beyond."

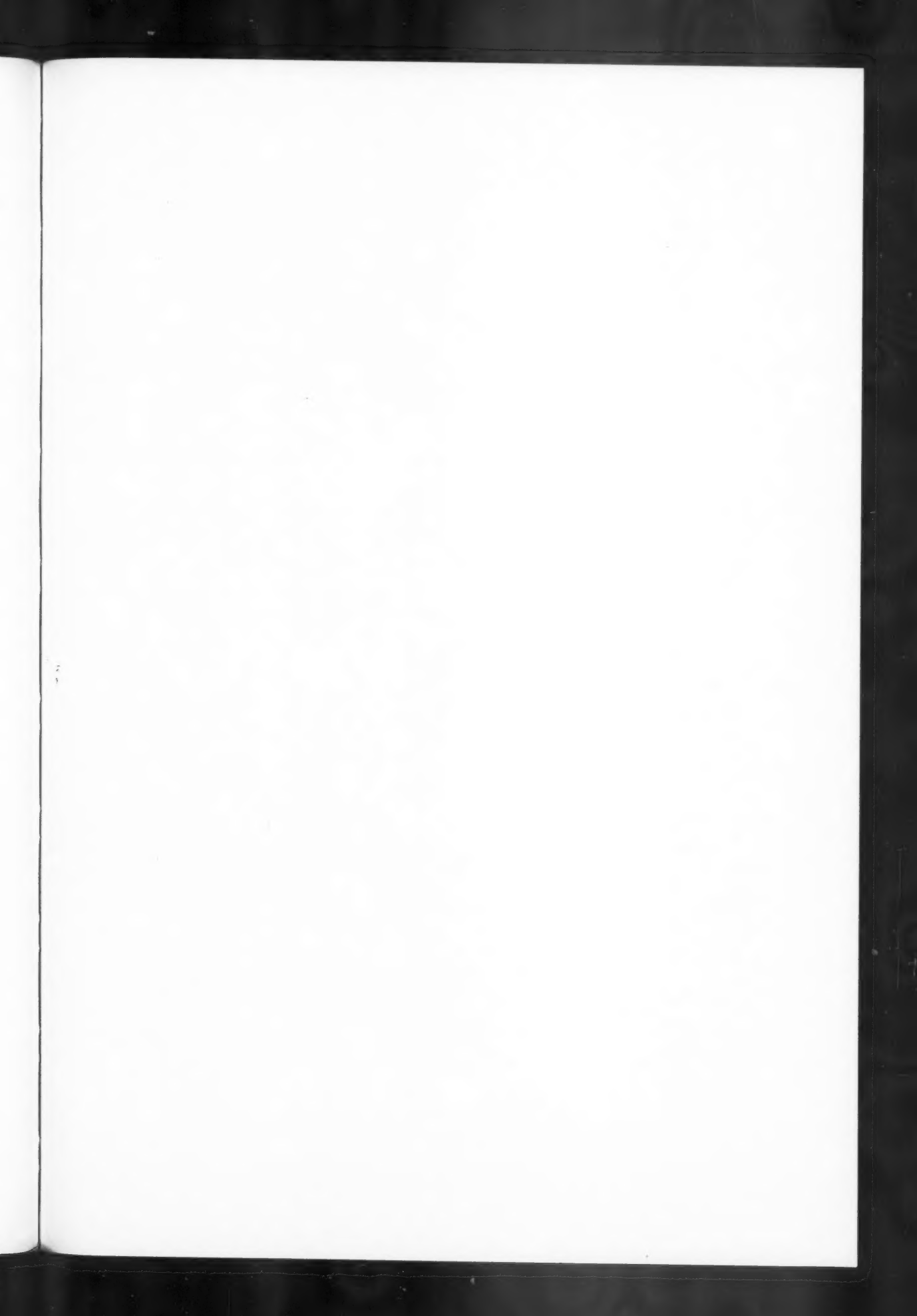
This sequence comprises the Classical efflorescence which used to be called "Old Empire" or "First Empire" and is sometimes called the "Initial Series" period. It follows two ceramic periods, *Mamon* (Uaxactun Ia) and *Chicanel* (Uaxactun Ib) which fall in a Pre-Vault period.

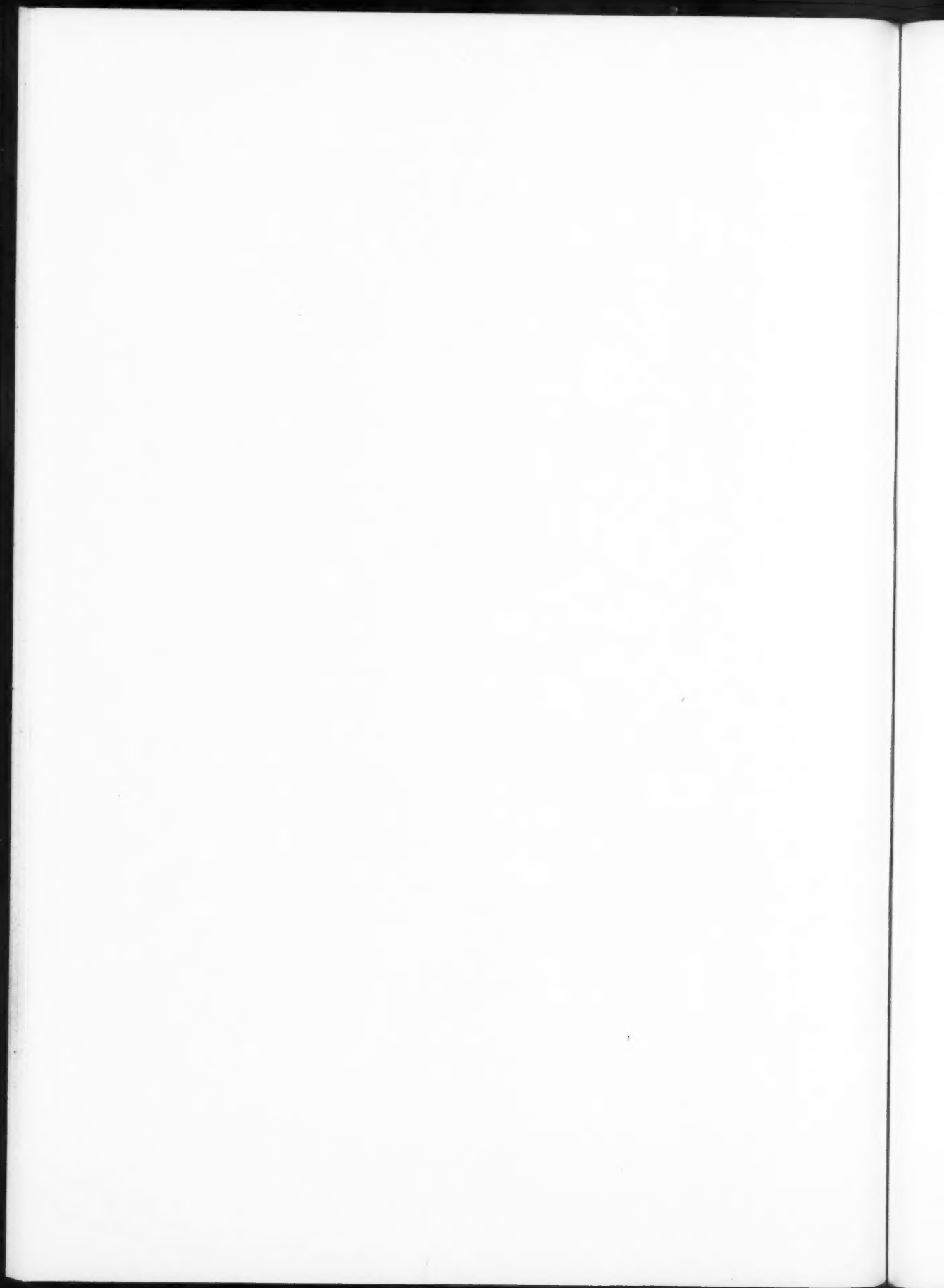
If one wishes to fit Smith's beautiful 700-year sequence of architecture into speculations on origins or the history of Meso-America as a whole, he will have need of the European rather than the Maya dates. These are correct for any variant of the "Goodman" correlation, one of which I believe will eventually be established to everyone's satisfaction. According to these, and in round numbers, the sequence runs from A.D. 300 to A.D. 900. However, for the present, if one does not feel competent to judge between correlation theories nor to accept the one which seems most "orthodox," then his speculations should allow for a first appearance of vaulted buildings and dated monuments anywhere between A.D. 1 and A.D. 800. This spread will allow for extremes among current correlations, the Makemson and the so-called Weitzel solutions. Needless to say, the value of Smith's great contribution will be immeasurably enhanced when all doubts respecting the European datings are eliminated, as I think they surely will be.

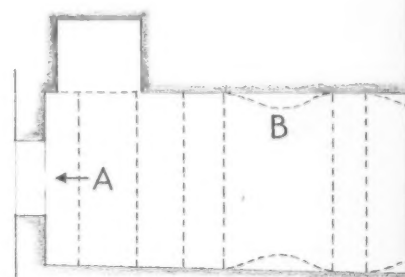
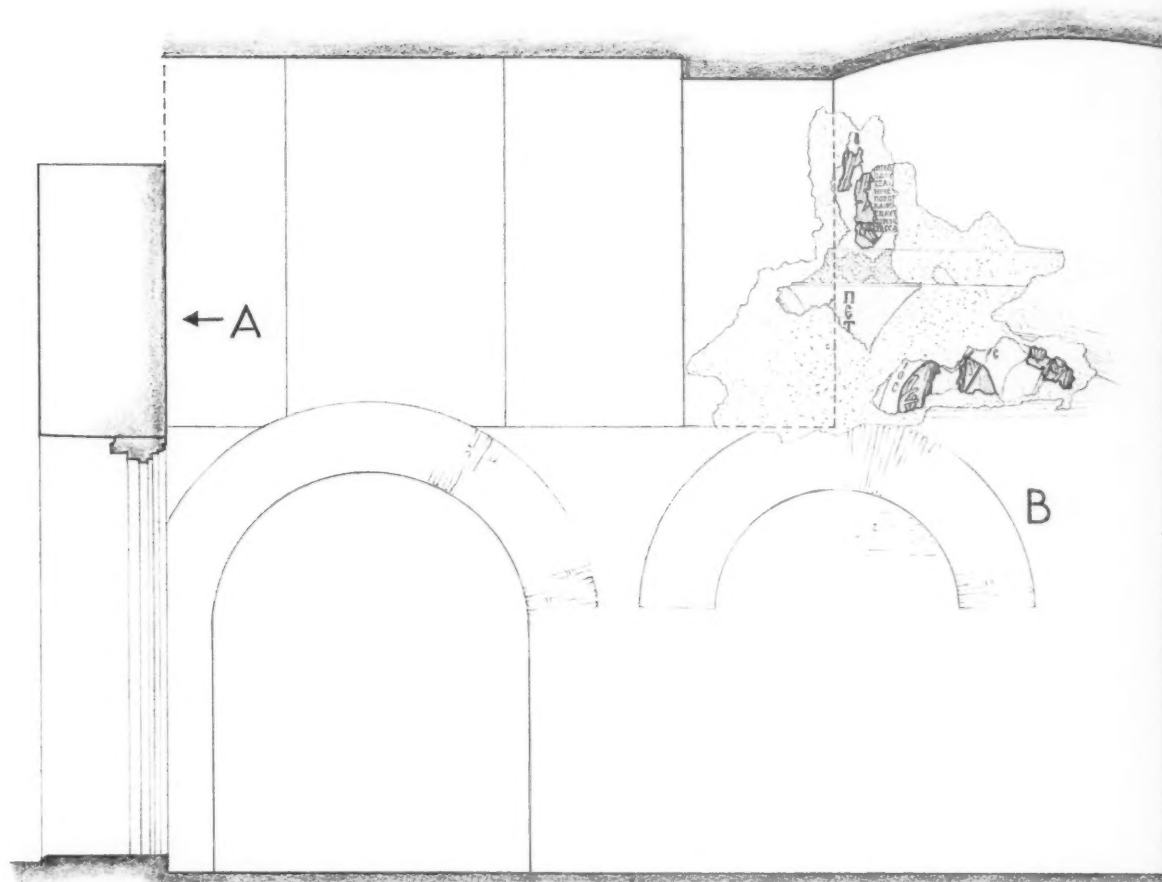
LINTON SATTERTHWAITE

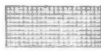

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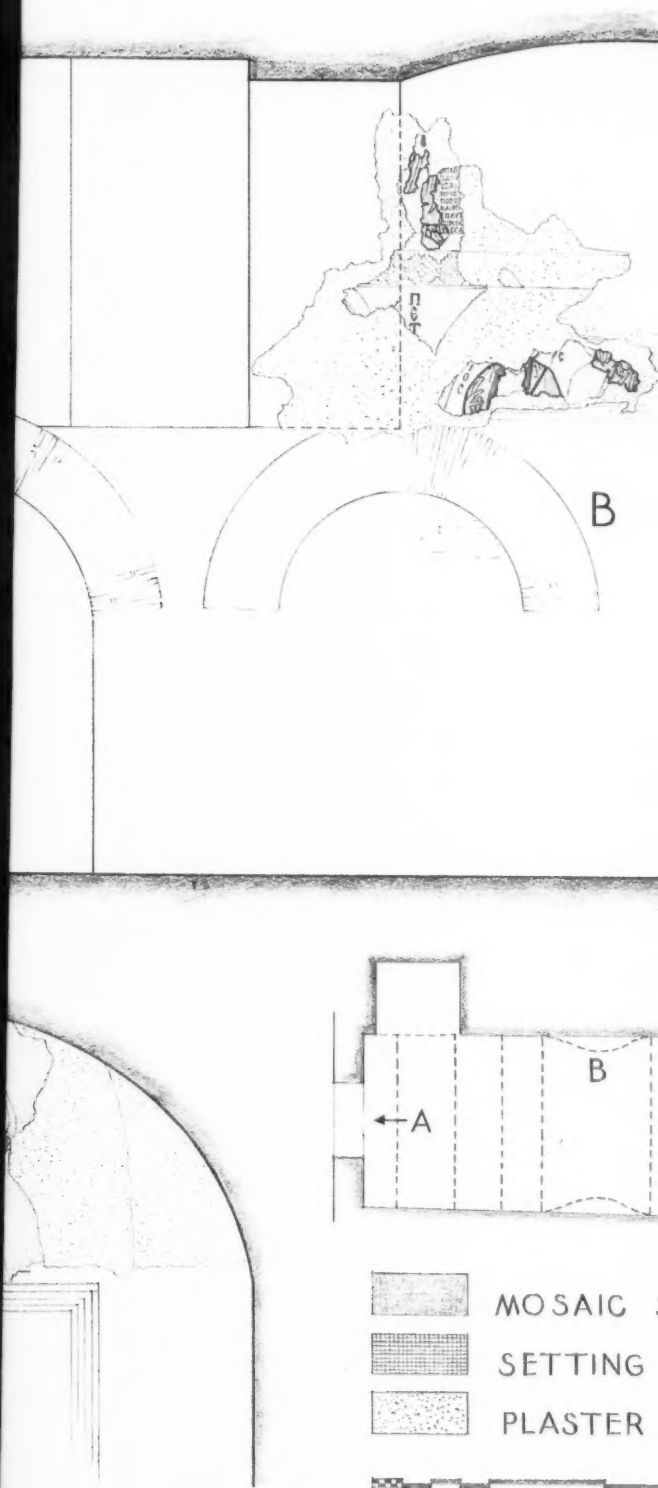




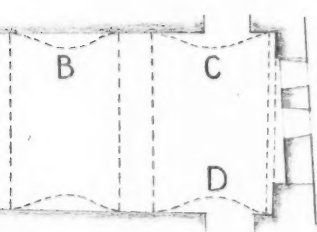
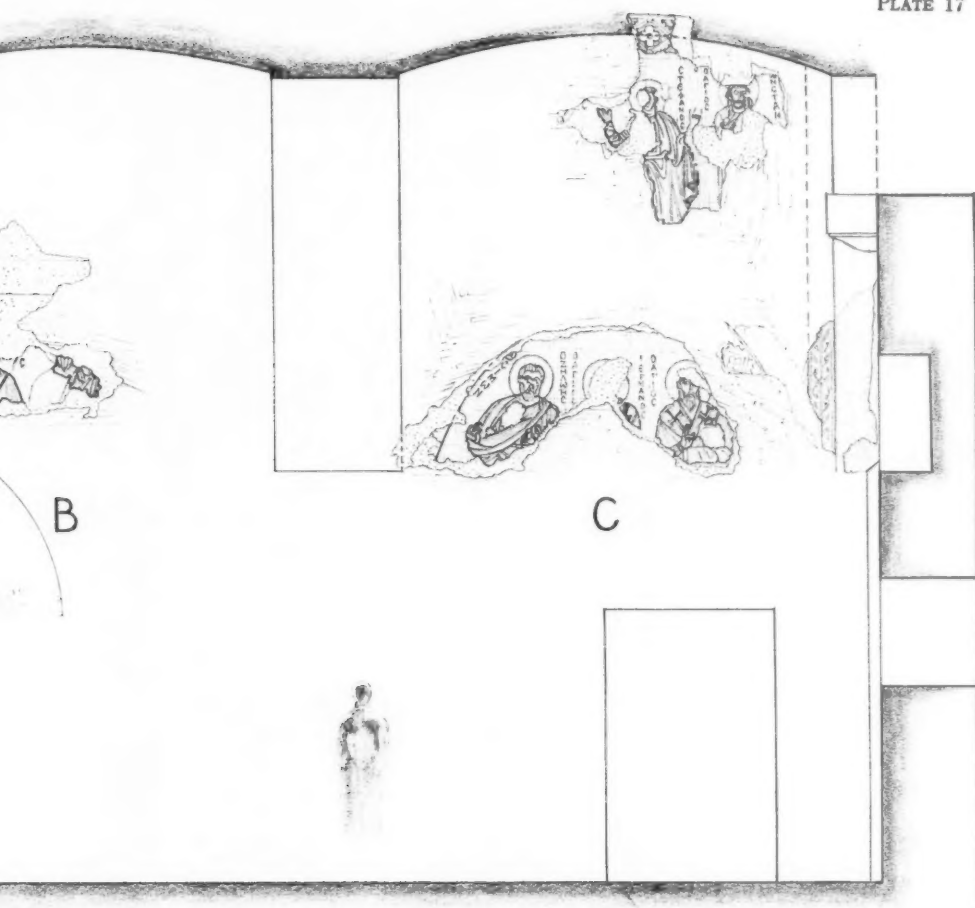


 MOSAIC SUR
 SETTING BED
 PLASTER REN

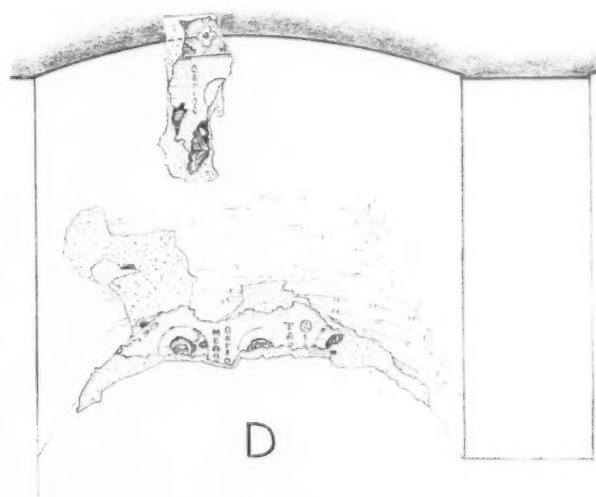
HAGIA SOPHIA, ISTANBUL. MOSAIC FRAGMENTS IN ROOM A



HAGIA SOPHIA, ISTANBUL. MOSAIC FRAGMENTS IN F

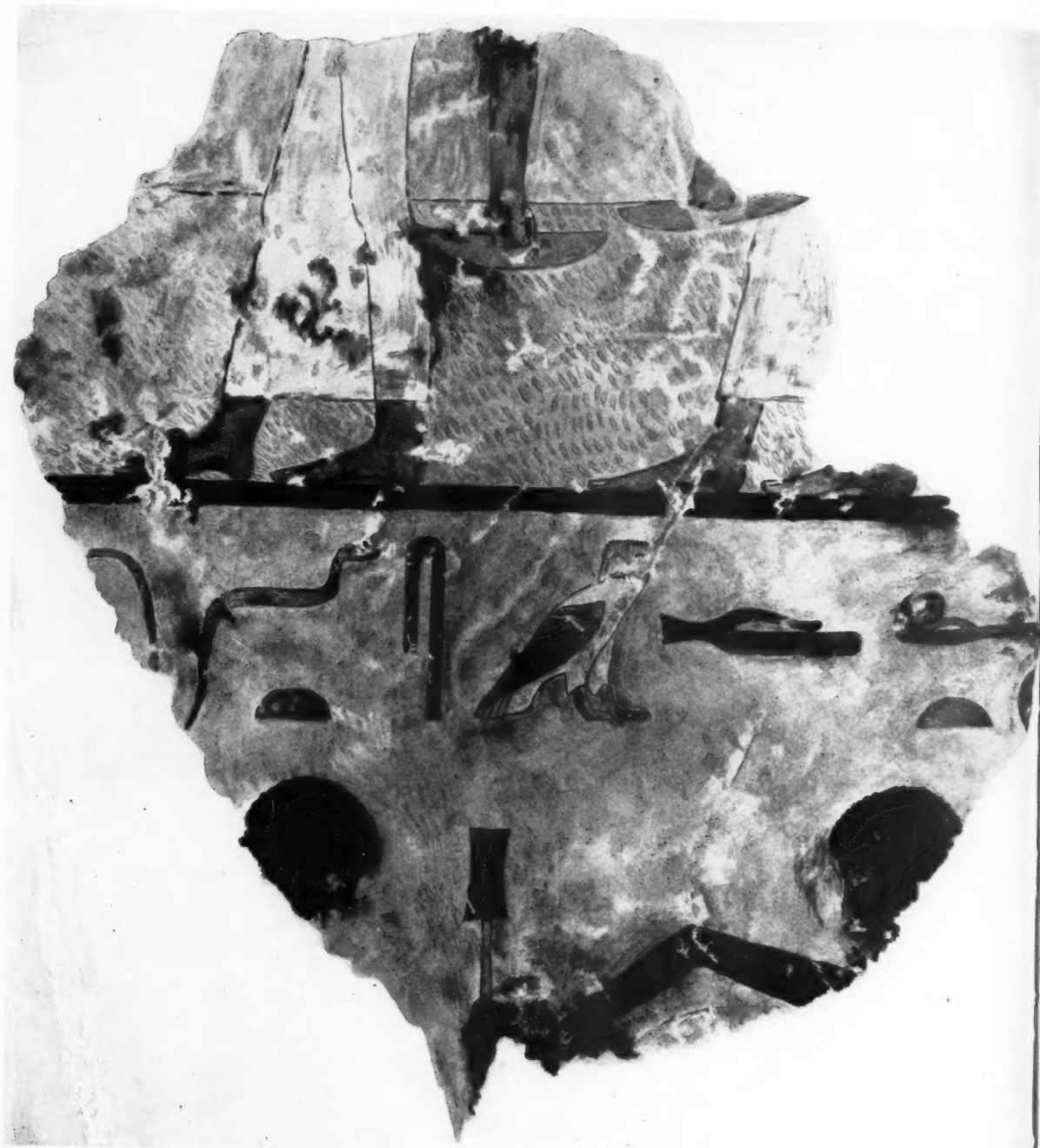


MOSAIC SURFACE
 SETTING BED
 PLASTER RENDERING

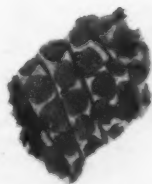
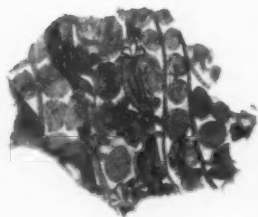
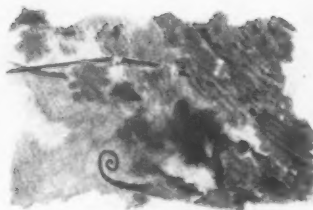
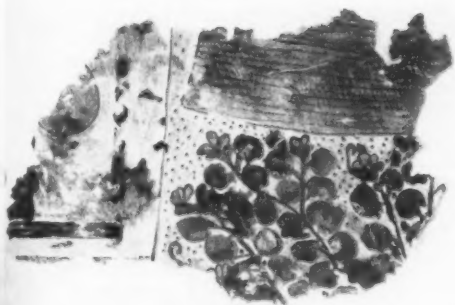


FRAGMENTS IN ROOM ABOVE SOUTHWEST VESTIBULE

PAU



DJEHUTY-HETEP. DETAIL OF EAST WALL.
[Smith, pp. 321-332.]



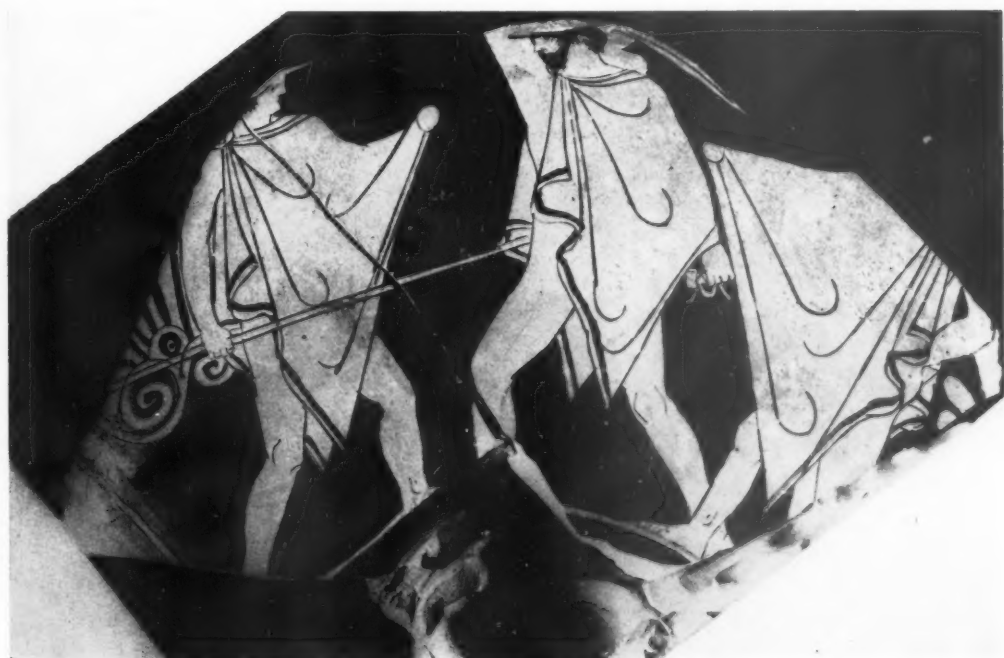
DJEHUTY-HETEP. DETAILS OF EAST WALL.
[Smith, pp. 321-332.]



DIEHUTY-HETEP. DETAIL OF EAST WALL.



A. BERSHEH. FRAGMENT OF SAT-MEKET COFFIN.
[Smith, pp. 321-332.]



B. FLORENCE, FRAGMENT.
[Kardara, pp. 293-300.]



A. BRITISH MUSEUM, KYLIX E 84.



B. BRITISH MUSEUM, KYLIX E 84.
[Kardara, pp. 293-300.]



METROPOLITAN MUSEUM, CAST OF THE TYRANNICIDES. Courtesy, Metropolitan Museum.
[Kardara, pp. 293-300.]



A. CALCUTTA MUSEUM. FRIEZE (LEFT-HAND PORTION).



B. CALCUTTA MUSEUM. FRIEZE (RIGHT-HAND PORTION).
[Soper, pp. 301-319.]



A. COPENHAGEN. ACHILLES AMONG THE DAUGHTERS OF LYCOMEDES.
Courtesy, H. Ingholt.



B. BERLIN. SEATED BUDDHA.

[Soper, pp. 301-319.]



A. CALCUTTA MUSEUM. FRIEZE (LEFT-HAND PORTION).



B. CALCUTTA MUSEUM. FRIEZE (RIGHT-HAND PORTION).
[Soper, pp. 301-319.]



A. BALTIMORE. LID OF SARCOPHAGUS. Courtesy, The Walters Art Gallery



B. TORONTO. FRAGMENT OF FRIEZE. Courtesy, Royal Ontario Museum of Archaeology.
[Soper, pp. 301-319.]



A. LAHORE. FRIEZE.



Rome, Vatican Museum - detail of sarcophagus

B. ROME. DETAIL OF SARCOPHAGUS.
[Soper, pp. 301-319.]



A. GROUP OF PĀṆCIKA AND HĀRITĪ FROM SĀHRI-BAHLOL.



B. FRAGMENT OF STELE FROM TAKHT-I-BĀHAI.
[Soper, pp. 301-319.]



A. STELE FROM JAULIÂN.



B. PESHAWAR MUSEUM. STELE FROM MAMÂNE-DHERÎ.

[Soper, pp. 301-319.]



A. TAXILA, DHARMARĀJIKĀ STŪPA.



B. PALMYRA RELIEF.
Courtesy, H. Ingholt.



C. SHAH-JĪ-KĪ-DHĒRĪ, "KANIṢKA STŪPA."
[Soper, pp. 301-319.]



A. PAPHOS DISTRICT MUSEUM, KTIMA. FRAGMENT OF STELE.
Courtesy, A. H. S. Megaw.
[Beazley, pp. 333-336.]



B. PALMYRA, TOMB RELIEF.
Courtesy, H. Ingholt.
[Soper, pp. 301-319.]



A. DIONYSUS POURING LIBATION.

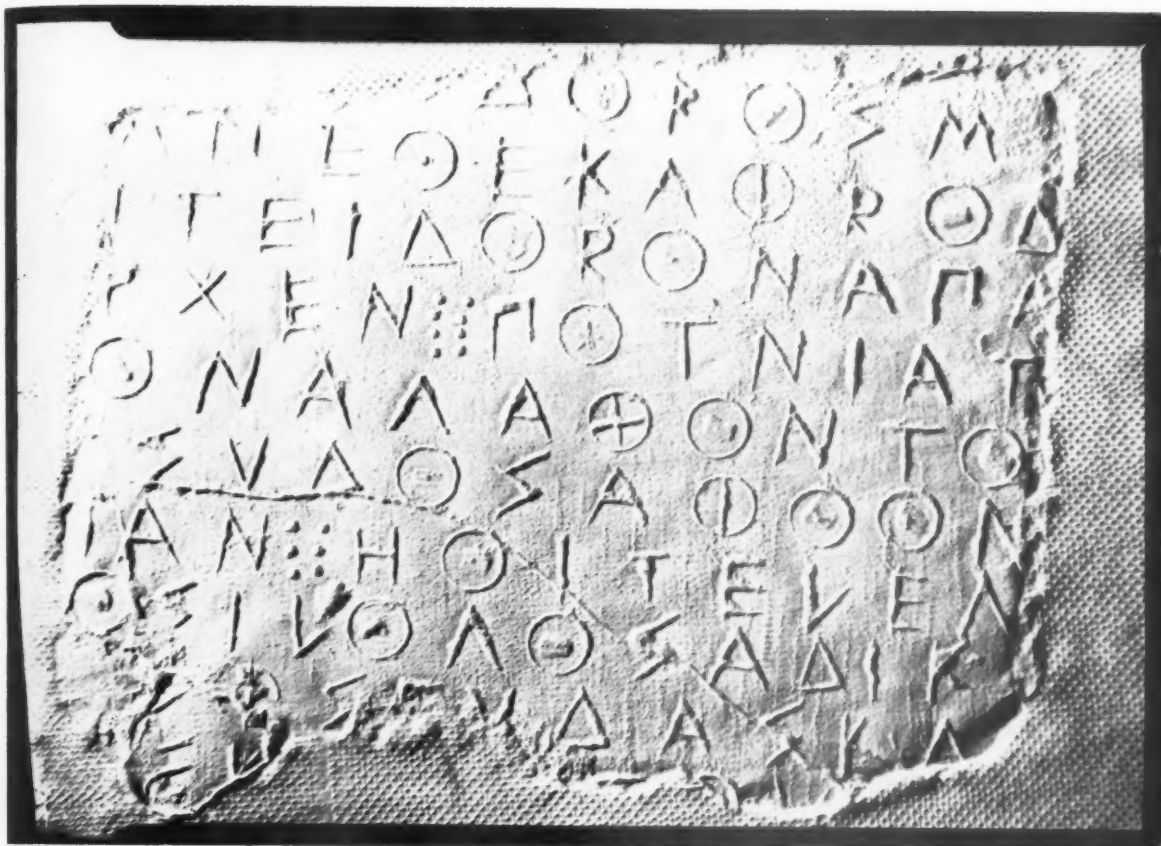
[Charlton, pp. 336-339.]



B. APOLLO POURING LIBATION
ROTHDALE MUSEUM, BRIGHT COLLECTION. BELL-KRATER



BOSTON, MUSEUM OF FINE ARTS. RHYTON. Courtesy, Museum of Fine Arts.
[Kirk, pp. 339-343.]



A. IG 1² 700 = DDA 296.



B. IG 1² 751 = DDA 342.
[Raubitschek, pp. 343-344.]

PLATE 36



A. *IG* 1² 4, LINES 26-27 =
SEG 10.5.

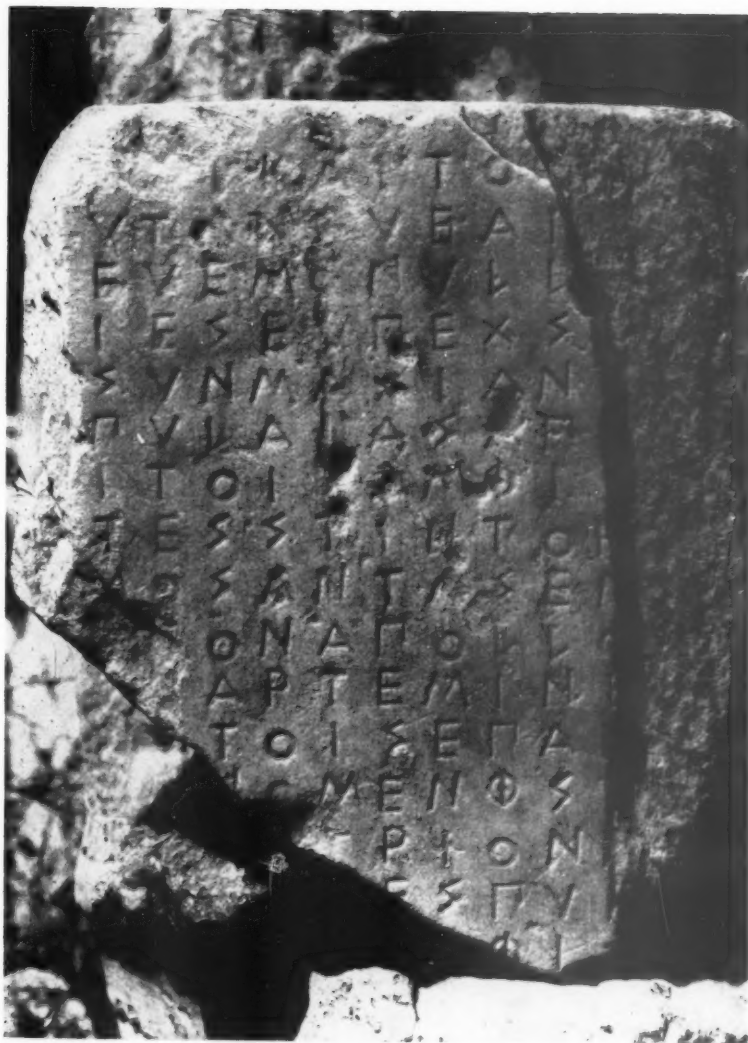


C. *HESPERIA* 2 (1933)
481 = *SEG* 10.404.

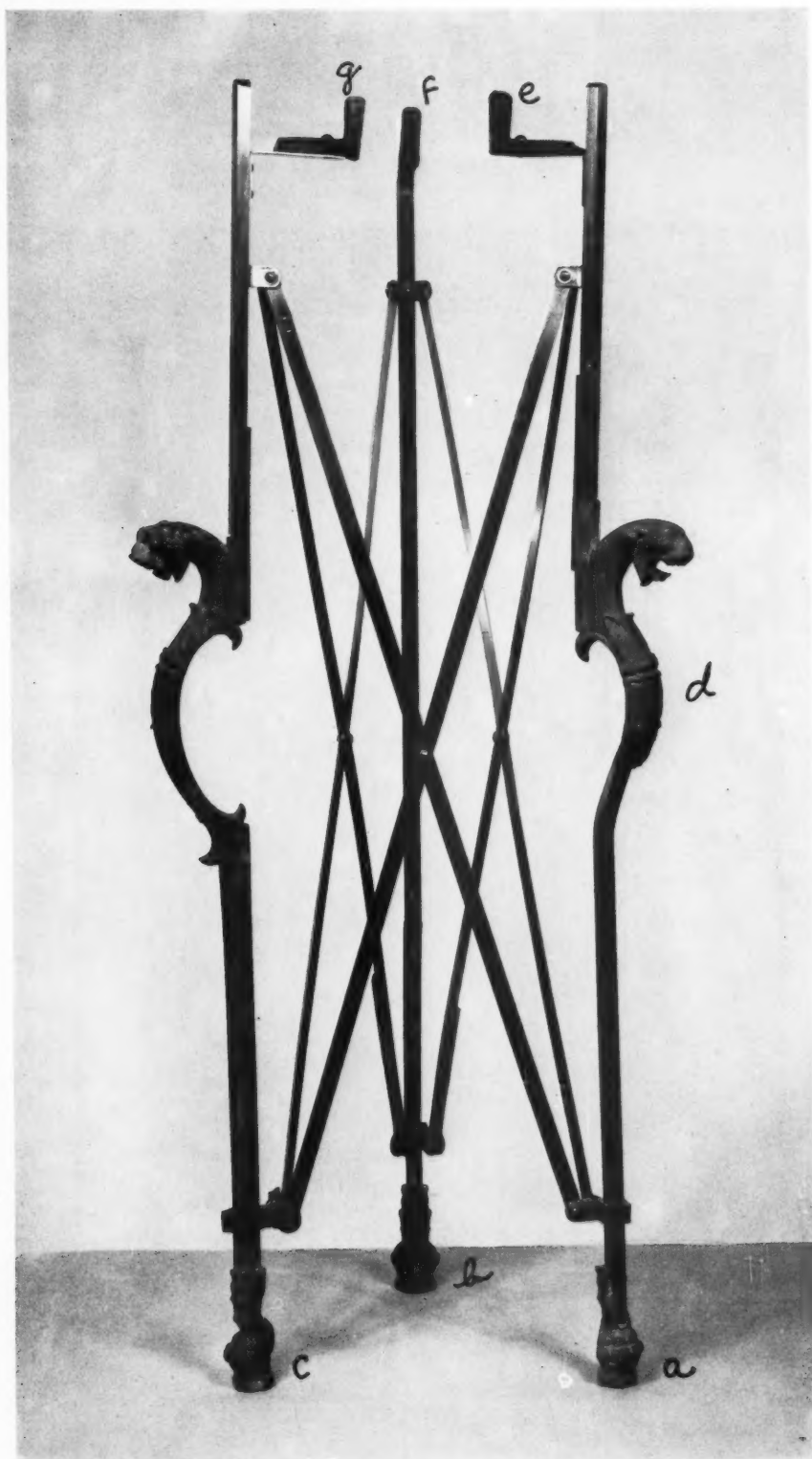


B. *IG* 1² 3, LINES 19-22 =
SEG 10.4.

[Raubitschek, pp. 343-344.]



IG 1² 26 = SEG 10.18.
 [Raubitschek, pp. 343-344.]



BALTIMORE, WALTERS ART GALLERY. ROMAN TRIPOD (RECONSTRUCTED)
Courtesy, Walters Art Gallery

[Hill, pp. 344-347.]



BALTIMORE, WALTERS
ART GALLERY. ROMAN
TRIPOD, DETAILS.
Courtesy, Walters
Art Gallery.
[Hill, pp. 344-347.]





THE METROPOLITAN MUSEUM OF ART. SILVER CHALICE.
Courtesy, The Metropolitan Museum of Art.
[Downey, pp. 349-353.]



B.



A.



D.



C.

THE METROPOLITAN MUSEUM OF ART. SILVER CHALICE. DETAILS OF RIM SHOWING INSCRIPTION.
Courtesy, The Metropolitan Museum of Art.

[Downey, pp. 349-353.]



A.



B.



C.

A, B, and C. THE METROPOLITAN MUSEUM OF ART. SILVER CHALICE.
DETAILS OF FOOT SHOWING INSCRIPTION.
Courtesy, The Metropolitan Museum of Art.
[Downey, pp. 349-353.]



D.

D. JEBEL ABU NEGILA. OLD NUBIAN GRAFFITO.
[Arkell, pp. 353-354.]



A. PARNDORF, MOSAIC.
Courtesy, B. Saria and G. Pascher.



B. PARNDORF, MOSAIC.
Courtesy, B. Saria and G. Pascher.



C. PARNDORF, MOSAIC.
Courtesy, B. Saria and G. Pascher.



D. MAGDALENSBERG. PRE-ROMAN FORTIFICATIONS,
FORUM AND TEMPLE.
Courtesy, Dr. H. Vetters.



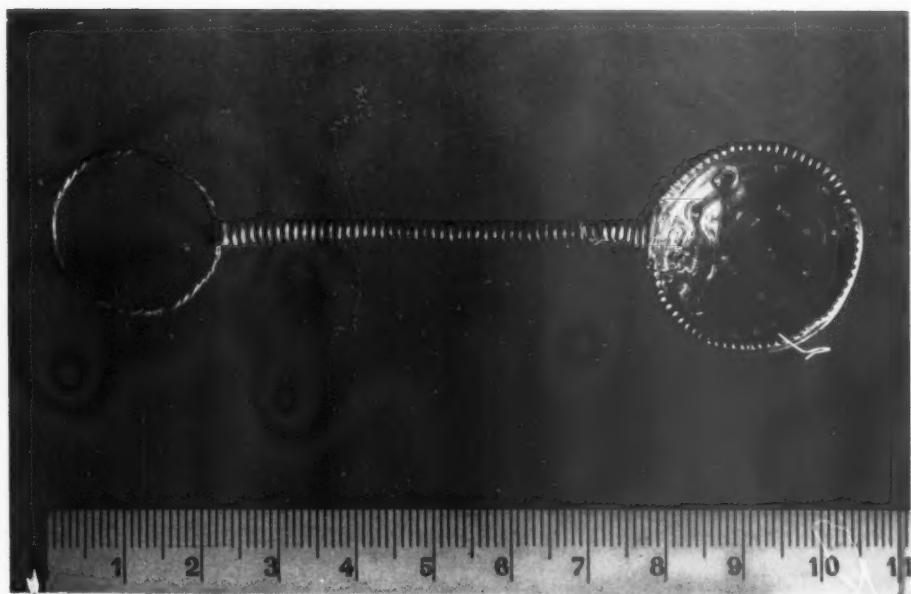
A. MAGDALENSBERG. MOSAIC SUPPORT FOR A WATER BASIN.
Courtesy, Dr. H. Vetter.



B. MAGDALENSBERG. FLOOR LEVELS IN THE TOWN HALL. Courtesy, Dr. H. Vetter.
[Archaeological News, pp. 372-375.]



A. HEUNEBURG, LATE HALLSTATT FORTIFICATION WALLS.
Courtesy, Prof. K. Bittel and Dr. A. Rieth.



B. HEUNEBURG, GOLD CULANDER OF THE LATE HALLSTATT PERIOD.
Courtesy, Prof. K. Bittel and Dr. A. Rieth.
[Archaeological News, pp. 375-379.]



A. OSTERBY. SKULL WITH SUEBIAN HAIR-KNOT. PROFILE.

Courtesy, Museum Vorgeschichtlicher Altertümer Schleswig.

[Archaeological News, pp. 375-379]



B. OSTERBY. SKULL WITH SUEBIAN HAIR-KNOT. TOP.



B. WEST COLOGNE. ROMAN PORTRAIT HEAD.
Courtesy, Prof. F. Fremersdorf.

[Archaeological News, pp. 375-379.]



A. EUTIN. WOODEN CULT FIGURES.
Courtesy, Museum Vorgeschichtlicher Altertümer, Schleswig.



JUNKERSDORF. JEWELRY FROM A FRANKISH CEMETERY.
Courtesy, Dr. F. Fremersdorf.
[Archaeological News, pp. 375-379.]

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GRANTS FOR SUMMER STUDY IN NUMISMATICS, 1952

The American Numismatic Society offers ten grants-in-aid for study in a seminar in numismatics to be held at its Museum, June through August, 1952. These grants will be available to students of high competence who will have completed one year's graduate study in classics, archaeology, oriental languages, history, economics, art or other humanistic fields. Each study-grant will carry a stipend of \$500 plus some allowance for travel expenses to New York.

The purpose of the grants is to provide a selected number of graduate students with a wider understanding of the indispensable contribution numismatics makes to other fields of study.

The program of the seminar will include assigned reading, attendance at discussions conducted by visiting specialists in selected fields, preparation of a paper on a topic of the student's selection, and actual contact with the coinages related to that topic. Problems will be treated which relate to such subjects as the following: the evidential values of coin hoards and excavation coins, coins and the early history of Greek city states, Byzantine art history from coins, disappearance of gold coinage in Western Europe and its later reappearance, migration and imitation of mediaeval coin types, contribution of Islamic coins to history and art. Among those who will participate as specialists are: Alfred R. Bellinger, Professor of Classics, Yale University; Glanville Downey, Associate Professor of Byzantine Literature, Dumbarton Oaks, Harvard University; A. M. Friend, Jr., Professor of Art and Archaeology, Princeton University; Harald Ingholt, Associate Professor of Classics and Art, Yale University; Thomas O. Mabbott, Professor of English, Hunter College; George C. Miles, Curator of Islamic Coins, Museum of the American Numismatic Society; W. P. Wallace, Professor of Ancient History, University of Toronto.

This offer is restricted to students in United States and Canadian universities. Further information and application forms may be obtained from the office of the Society, Broadway between 155th and 156th Streets, New York 32, N. Y. (Sawyer McA. Mosser, Secretary). Completed applications must be filed by April 1, 1952.

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